ADVENTURES OF FUTURE SCIENCE

August

WONDER Stories

HUGO GERNSBACK
Editor

A GERNSBACK PUBLICATION

"THE SPACE COFFIN"
by A. Rowley Hilliard

Other Science Stories
In This Issue

"FLIGHT INTO SUPER-TIME"
By Clark Ashton Smith

"TYRANT OF THE RED WORLD"
By Richard Tooker

"THE PLATINUM PLANETS"
By George B. Beattie

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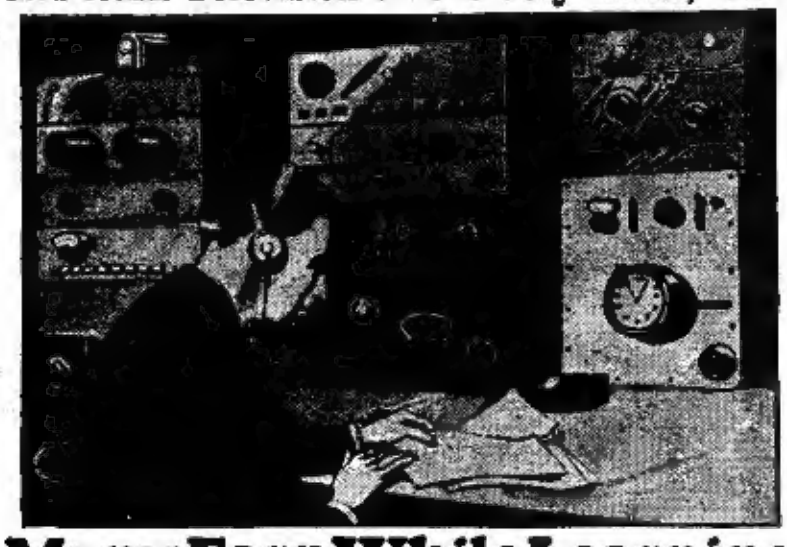

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The Magazine of Prophetic Fiction

WONDER Stories

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ON THE COVER THIS MONTH

taken from A. Rowley Hilliard's, "The Space Coffin" we see the intrepid detective imprisoned in a glass coffin and falling swiftly to earth from a great height. Beside him, a fortune in gold, is the ransom collected by the mysterious Adjustors.

NEXT MONTH

The Death of Iron
by S. S. HELD

We know that our present civilization is founded on our use of metals.

Destroy our metals, and the human being would be no better off than his forebears of the stone age. What would happen then if some mysterious disease were to attack our metals, and spread swiftly like a contagion throughout the entire earth? This unusual story with its powerful theme, we have imported from France, after its sensational success there. We present it for the first time in America to the readers of WONDER STORIES.

After Armageddon
by FRANCIS FLAGG

is a new thriller by that popular author; a human story of the cataclysmic effects of a future war, sweeping like a thunderbolt upon humanity. We will see in this story how humanity attempts to readjust itself to its changed circumstances, and how old leaders are toppled in the dust and new leaders emerge to guide the starving war-weary race.

In Martian Depths
by HENRIK DAHL JUVE

Mr. Juve returns to our pages with a stirring story of adventure in the depths of a new and unexplored world. The bitter struggle against a hostile nature, against hostile inhabitants, against their own weaknesses, cause tragedy to the earth explorers. And how they try to fight their way out of their terrible predicament Mr. Juve shows with vivid clearness.

Crossroads of Space
by ARTHUR G. STANGLAND

gives us an insight into the great dramas that will take place in the vastness of interstellar space after its first conquest. This story pictures puny man against a background of strange, almost devilish invisible forces. Like microbe in an infinite world we see our heroes struggling to maintain "the crossroads of space."

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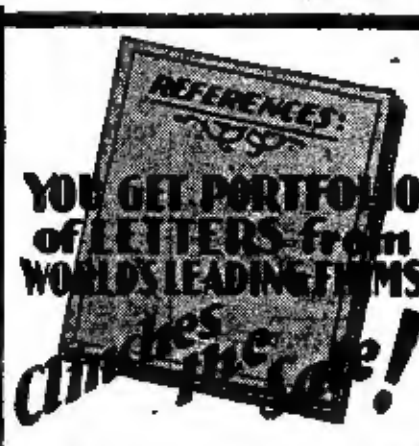

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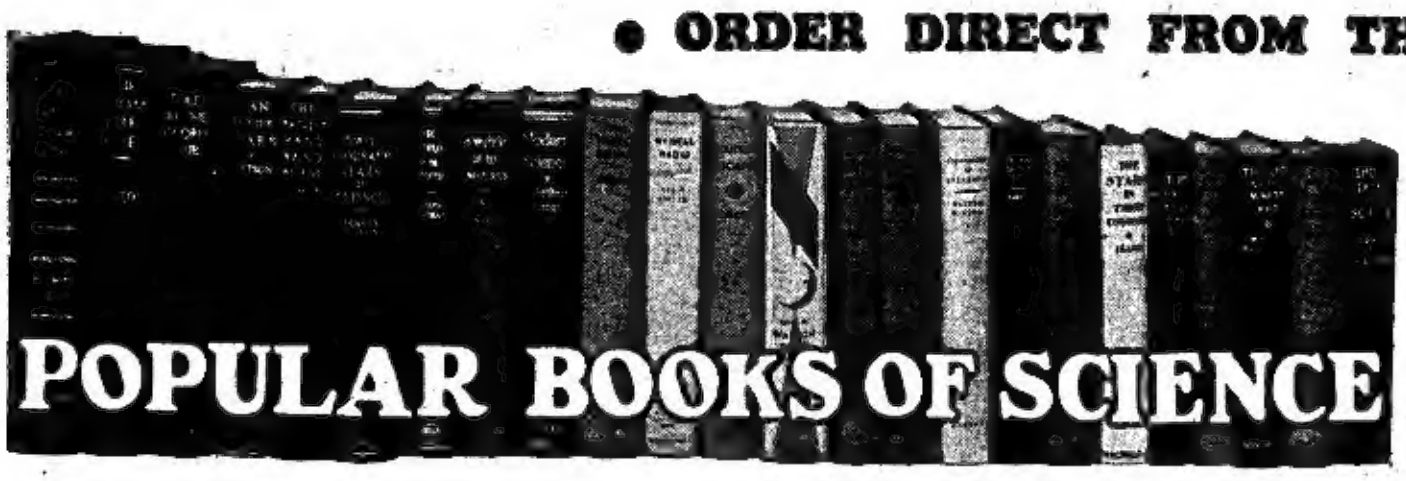

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EDITORIAL PAGE
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WONDER Stories

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THE WONDERS OF KNOWLEDGE

An Editorial by HUGO GERNSBACK

● It is surprising that we, who pride ourselves on our acquired knowledge, have to admit that in the end there is really nothing that is known to any degree.

It is really amazing how little knowledge we actually have on ANY subject, and how little man can hope to know of his surroundings. Whether we go up to the heavens or down into sub-microscopical worlds, the story is always the same. We find that there is nothing knowable and if we were to draw a scale we would have to admit that our knowledge on any subject, compared to a *mile* measuring stick would probably not go further than the thousandths of an inch on this scale.

The trouble, of course, is the limitation of our senses. We can hear only over a comparatively minute range of sound; we can see only over an infinitesimally small section of the spectrum; we can feel only the surface of some of the objects and these most imperfectly; we can smell practically nothing; and our sense of taste is woefully deficient.

It seems that only the effects of certain things are perceptible to us, and even those to no large extent. Take such a simple thing as sound. We have not the slightest idea of what sound actually is. The same of light. Nothing at all is known about the actual nature of light today, and we certainly do not know much more about it than was known in Newton's time, possibly less. We know of a number of light phenomena, and we know what happens when light strikes certain objects, but of the nature of light itself, how it is propagated into space we know next to nothing.

The same is true, of course, of such instrumentalities as, for instance, radio waves,—although it is still an open question that they are waves. They might be something entirely different, that we know nothing about. What happens after these so-called waves leave the transmitting aerial until they strike the receiving aerial, nothing at all is known.

When we come down to material objects, the case grows even more hopeless. No matter what you touch or feel, nothing at all is known about the ultimate constitution of such matter. Every year scientists change their definitions of molecules, atoms, electrons and protons, all of which are theoretical, because man has never seen or felt one; and it would seem that for thousands of years to come, nothing can possibly be known about the ultimate constitution of matter.

On the other end of the scale, nothing much is known either. We talk glibly about our planetary system and the stars beyond—island universes and nebulas—but nothing is actually known of these. One theory is as good as another, and even the origin of our own planet and the solar system is subject to a great deal of controversy. In truth, no one knows anything about it, and here again one theory is as good as another.

How can we have any knowledge of the world around us when we have not the slightest knowledge of ourselves? We do not know what makes us think, what makes us reason, and we have no proof that our reasoning, such as it is, is correct. The interpretations which we place upon most things are simply the result of following someone else who thinks he had the right idea about it, but probably fifty years or a thousand years hence it will be found that our entire reasoning was wrong from beginning to end.

Our senses by no means guide us aright. Thus, for instance, the ancients thought the sun was actually rising while the earth stood still. It took thousands of years to find out that this reasoning was wrong, and that it was not the sun that rose but the earth that turned.

Most human logic is erroneous, and the sum total of our knowledge therefore is dangerously close to nil.

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(*Illustration by Paul*)

For an hour or more we experimented with the creatures, discovering that light blinded them. But they were conscious of our presence.

TYRANT OF THE RED WORLD

BY RICHARD TOOKER

● Many of the early stories of science about adventures on other worlds were called "Utopian;" because the author used the interplanetary adventure as a means of picturing another civilization better and finer than our own.

And just as men, dissatisfied with their present conditions have gone venturing into new parts of the earth, so men in the future may settle upon other worlds.

But suppose that a group of explorers who had hoped to return to earth after their interplanetary journey found they were stranded upon an alien planet; and hope of rescue was slight. Faced with the prospect of remaining for the rest of their lives, what would be their reactions? What kind of a world would they try to construct for themselves; and what would be their adventures in fighting for the necessities of life upon a hostile planet? These questions our author answers in this striking and unusual tale.

● The passing of the meteoric sphere was the greatest hazard experienced by the *Arthane's* famous crew during the first flight beyond the earth's atmosphere in 1948. Words fail me when I attempt to describe the grinding roar of countless tiny bodies against the adamant walls of the Aldane space ship, the suspense each one of us felt as to our fate, the flush of triumph when the great ship plunged through the last of the meteoric clouds, to shoot onward toward the moon, like the thunderbolt of an immortal.

My post from beginning to end of that fateful voyage was at the intricate keyboard of the cosmograph, or space radio, which employed light impulses in the cosmic rays instead of electricity for communication over vast distances. I was in an excellent position to judge the reactions of the crew of nine, and as soon as we recovered from the terrific shock of propulsion through the stratosphere, I began sending our impressions to earth by means of the cosmograph.

We had previously agreed to communicate by numbers aboard ship, each having his numeral displayed on his space suit, which was worn inside the ship continually, owing to fear of sudden disaster, which might force us to parachutes, or arthane* hand-guns at any moment. Not long after projection, which had been made from a huge, steel tower near the experimental plant in the Arizona desert, it became evident that all thinking and acting must be almost as mechanically perfect as our name-numbers if we were to circumnavigate the Moon successfully as planned by Frank Aldane (No. 1), commander and inventor of the space ship.

Absolute zero was reported by No. 13 in his thermal soundings directly after we cleared the meteors. No. 15, in the heating compartment, had turned on the sun-heated boilers to full blast, yet we felt no discomfort in the space suits, owing to the extreme cold of the stellar void. Nevertheless, I thankfully obeyed No. 1's command to open helmets and remove airtight gauntlets, which were uncomfortably restrictive to vision and movement.

No. 7 had turned on the air generator in the compartment just below mine, and the interior of the ship was charged to breathing density when I drew in my first breath of correctly diluted oxygen, shutting off the tube from my private tank. We must all have been anticipating Frank's next command, to open sun-shutters on all lookout ports on the dark side of ship.

"Sign off a moment," I transmitted hastily to Aldane Hangars, where Frank's brother, Herbert, was receiving our messages and broadcasting them to the world. "We are about to look for first time on the universe at 1,000 miles altitude."

All interest in my immediate surroundings had vanished by the time the eyes of my periscope-like lookout were opened. At first I could hardly believe that what I saw was not an illusion, that it was the same sky which had greeted my eyes for thirty-odd years of life on Earth.

In a field as devoid of color as an ocean of lamp-black gleamed millions of stars, literally millions. We had long since passed the point where the reflection of sun-rays on Earth's atmosphere could tinge the firmament with faintest azure. Even more startling was the fact that the legion stars of lesser magnitude, and many even of first magnitude, were of an intense, sapphire blue. Though I had foreseen in theory how the heavens would look at that altitude actual observation was quite something else.

Before us the Moon stood out like molten silver against the blue-spangled walls of darkness. It had grown to nearly five times its size as seen from Earth, which appeared behind us as an illimitable, grayish haze. Beyond the pall that enshrouded the Earth's face were the Stygian "coal sacks" and the Magellan clouds, now revealed to be millions of distant stars in nebulous aggregations. The sun, when I focussed briefly upon it, safe from injurious rays behind the lens filter, was a lurid mountain of fire, bearded and crested with a vaporous corona.

The voice vibration of No. 1 recalled me suddenly to the pressing duties of my post, and with clumsy fingers and inadequate vocabulary I began the stupendous task of reporting to Earth the appearance of outer space.

By that time our speed had gained to 8,000 feet per second, and a number of unpleasant physical disturbances

*A liquefied gas with molecules highly electrolyzed. The success of the Aldane expedition largely depended on this superfuel, for which the Aldanes had named the first space ship.

had combined to make rational thinking somewhat difficult. However, the explosions of the occasional rocket blasts by which the *Arthane* was propelled, were scarcely noticeable. To some extent we were becoming adjusted to extremes of sound, temperature and velocity.

I had at last completed an abbreviated description of the stellar skies, when I chanced to look down into the air generating chamber to rest my eyes for another observation. It was altogether disinterestedly that my gaze became focussed on No. 7's hands, now bare of gauntlets and fixed on a delicate instrument of the air generator dials. The hands were long and white in the pale glow of the electric bulb; strong, yet somehow too soft looking for a man's hands. Surely Luther Cuthbertson, the chemist, supposed to be in No. 7 space suit, did not have hands like that. I looked again, and in cold, stunning comprehension I knew that those hands belong to a woman, to Barbara Weyden, chief chemist for the Aldanes.

For an instant I was completely dumbfounded. Hours before I had fought out a silent battle between love and ambition, and ambition had won. I never had expected to see Barbara Weyden again, and the knowledge that she accompanied us to what we all believed to be certain death somewhere in space, was unnerving.

My next message to Herbert Aldane was not what No. 1 relayed from the control room.

"Barbara Weyden is in space suit of No. 7," I flashed over the invisible wires of the cosmic rays. "What happened to Cuthbertson?"

"Hoped you wouldn't find out," came the reply in the crackle of the electrons. "Cuthertson is either crazy or yellow, or both. He started to run away, came back. Broke down here in receiving room and confessed to letting Barbara go in his place, disguised by space suit. He's raving. Don't tell Frank!"

● My reactions after the discovery that Barbara Weydon was one of the crew may be surmised. Mingled joy and despair possessed me. If we were doomed to die, then she would be with me to the end, and there was something exalting about meeting death in space with the woman one loved. But what if Frank Aldane discovered her? What if the morale of the crew was shaken by the discovery that a woman dispensed the precious vapors in the air generating room?

But I gradually calmed myself by assembling the facts in the matter. Barbara was more capable of handling the air generator than Cuthbertson, since she had invented a large part of it. Moreover, she had passed the preliminary examinations and physical tests with higher honors than two of the crew, though women had been disqualified for actual membership in the crew.

More and more optimistic as we tore on through the black silence, I reassured myself that none would be the worse for Barbara's ruse, and turned back to the periscope. I was now able to locate several planets and major constellations in the bewildering riot of stars. Saturn glowed bright yellow on the left, the dull red Mars not far to the right. Neptune and Mercury, smaller and less fiery, were outshone by the streaked, blood-red face of Jupiter, king of the solar bodies. Softly green and tinged with violet, Venus hung directly west of us above the sun.

Owing to my position I could not see directly under the ship, but my view of the nadir was sufficiently acute to give me that queer feeling of instability caused by seeing stars beneath one. Spiral and crab nebulae thronged the clouds of darkness; galaxies, suns, binaries trillions of light years from the solar system forcibly impressed me with the minuteness of all that Earthman could see even through his most powerful telescopes.

At a distance of several tnousand miles from Earth our planet began slowly to take shape behind and a little below. Out of the mist-like curtain that at first had obscured it, the great globe loomed up in greenish moonfire, covering the whole heavens in that direction. Against the pale background of the oceans the American continents stood out in silhouette, the polar ice-cap buried in vapor.

All this I transmitted to Earth via the cosmograph, while we rocketed on through immemorial silence.

We had been in the ether for more than six hours before there was any change in the *Arthane's* course. Then No. 3, in the pilot-room, reported electrical phenomena somewhere to the left; not lightning, but vast areas of dormant voltage, which we did not understand. Serge Bjornsen, or "Mad" Bjornsen, as we had come to call the strange man in No. 3 space suit, was seldom in error; his genius had been largely responsible for the *Arthane's* navigation instruments, and Frank Aldane promptly fired a steering salvo as suggested, throwing us in a vast arc away from the unknown disturbances of the void.

Directly after the change of course, I caught myself on the verge of sleep, starting up all atremble to hear No. 1's voice in my ear through the tube:

"If drowsiness is noticed as a result of sluggish circulation take two of the red food tablets with the digitaline content."

I fumbled in my space suit for the case of concentrated food and stimulants which we all carried, and glanced anxiously below to see how the stowaway was faring. She also was reaching for her case of foodtablets.

At five o'clock, earth-time, we began to fall into the moon. At that time, with a mere touch of hand, or fingertips, on either side of the cosmograph, I could move from wall to wall of my compartment. Yet the tendency was to adhere to the front wall because of the slight moon gravitation then drawing our virtually weightless bodies forward.

It is impossible adequately to convey the gradual increase in size and visibility of the Moon as we rushed toward it like a beam of light. Within 30,000 miles of the stupendous sphere the whole northern heavens were hidden as by a world in the molten stages of evolution. Only the lower right edge of the Moon was in the shadow of the lunar night, whose inky tentacles spread over into the fiery deserts and mountains where a sunset was in progess.

By nine o'clock the Moon's gravity had become so strong as to be distinctly noticeable. I began to have trouble keeping my place before the cosmograph. At No. 1's suggestion we strapped ourselves in. Within 155,000 miles of the Moon a brilliant white light shone into the ship from the conning windows. No. 1, visible through the circular passageway ahead of me, was illuminated by a halo almost like limelight. In that unearthly radiance, we dived into the Moon like some phantom express train.

At an altitude of about 7,000 miles the Moon began

to lose its spherical contour and become a tremendous, circular landscape, the eastern quarter in deep shadow. Through the blinding white light that enveloped us, the mountain ranges loomed up like the jagged spines of prehistoric saurians. Some of those twisted bluffs were 24,000 feet high and never had known the erosive effects of humid atmosphere. Around the pitch-black crater maws the sharp edged ridges seemed to bubble and throb under the sunlight temperature of 100 degrees C.

No. 1's sharp command to prepare for deceleration salvos caught me off my guard, but I was not the last one to climb into the waiting shock absorbers which had enabled us to withstand the shock of projection, and would now serve the same purpose in descending and slowing down. But so slight was the Moon's attraction that we scarcely noticed the tremendous back-thrust of the forward batteries.

"Eight hundred miles per hour. Twelve hundred miles off Luna," called No. 3 as we returned to our posts from the shock absorbers.

When I looked again through the periscope an awesome change had come over the lunar terrain. No longer did the haze of distance obscure those mighty mountain ranges. Divides like titanic axe blades thrust up at us, seeming to sway and teeter as we plunged nearer. Badlands! Mountains! Devil's garden! Nothing on earth could compare with that sun-weltered landscape of the Moon, as we leveled off on our circumnavigating course, the altitude-maintaining rockets and drift adjusters detonating steadily along the *Arthane's* great keel.

We crossed hundreds of miles of saw-toothed mountains and tundras of lava before we reached the edge of the lunar night. Then Earth disappeared behind us, the sun glaring balefully over the stark horizons.

"Prepare for altitude salvo," came No. 1's warning through the speaking tubes. "Train cameras for recording peak contour of Moon."

● The roar of the altitude batteries broke in on my speculation as to the maneuver about to ensue. Glued to my recoil chair, especially constructed for just such shocks, I strained forward to the periscope mirror, watching the dead world take shape below. As we soared higher I made out the diminishing horizons indicating the pear-like elongation on the side away from Earth. Then, leveling off at a tremendous altitude, we reached the massive knob "behind the Moon", and again dived down, nauseated by the swift change of course. As I transmitted the observations to Earth, No. 3 droned the news that electrified every one:

"Under the Moon—going back to Terra!"

The knowledge that we were homeward bound at last revived me like a shower of ice water. I wanted to leap down into No. 7's compartment, seize her in clumsy embrace and dance a mad ring-around-the-roses. But I did no such foolish stunt. I remained stolidly before the cosmograph, sending monotonously:

"Coming back west of Moon. Starboard shutters closed against sun. Port windows unveiled. Cameras working at eight hundred miles altitude. All's well."

We were nearly 50,000 miles from the Moon on the return to Earth when No. 1 informed us through the speaking tubes that Mad Bjornsen was to try out our safety devices by leaving the ship in the void. At the time the anticipation of such an intrepid feat was a nerve tonic that I, at least, fully appreciated, for the hours of unremitting strain had begun to tell heavily in spite of the digitaline stimulant.

Richard Tooker

Through the circular passage to the control room, still brightly lighted by the Moon, I saw No. 3 in his space suit flounder into view, feet scarcely touching the floor as he pulled himself along. As he dived into a lower passage leading to the exit air-lock, I turned to the cosmograph, flashing the news of Bjornsen's venture to Earth.

When I looked down again No. 7 was helping Bjornsen into the air-lock. He carried a coil of light steel cable with a hook on either end to attach him to the ship when he dropped off. Ready at his belt was an arthane propulsion gun. The bloated space suit with its human core was finally forced down into the air-lock and the inner door closed and screwed down by No. 7.

With some anxiety as to whether Mad Bjornsen had penetrated Barbara's disguise, which was dispersed by her cool resumption of duties, I at length turned to the periscope and adjusted it for observation on both sides the ship. No. 1's tolling off for deceleration salvos followed, but we were not required to get into the shock absorbers.

Eyes glued to the periscope mirror, I resumed transmission on the cosmograph, as I waited for No. 3 to appear in the dense darkness hemming us. I knew what Bjornsen was doing in the air-lock: adjusting private oxygen duct, igniting heat-cartridges in the lining of his space suit for resisting stellar temperature, setting the charging valve on the arthane hand-gun by which he would shoot himself this way and that.

Suddenly an odd figure floated up from under the port side of the ship. It was Bjornsen, but he did not appear as a human being. The sunward side of his balloon-like space suit was vividly lighted, the dark side invisible save for a faint glow from the rapidly receding Moon. He seemed as helpless as an infant, and was for a fact at the mercy of the lunar gravitation save for the arthane gun and the tow cable attached to the ship at the outer door of the air-lock. Two streams of vapor exuded from his heels where relief cocks permitted the gases from the burning heat-cartridges to escape.

I was almost convinced that he had become unconscious from some unexpected strain when he suddenly came to life, pointing the arthane gun toward the Moon. There came a flash of blue flame and Bjornsen soared swiftly backward as far as the cable would permit him.

So absorbed was I in the startling performance of No. 3 that I was hardly conscious of my steady manipulation of the ray-key. All speaking tubes were silent throughout the ship. I sensed that every eye was bent through

lookout ports upon those perilous acrobatics in the void.

Again and again Bjornsen shot himself through the vacuum, defying all hitherto unbroken laws of gravitation and human limitation. And to cap the climax, he became so confident that he unhooked the cable and horrified all of us by darting about loose in space.

It was while the crew was most absorbed in No. 3's nerve-racking exploits that the hand of doom stole over us. I shall always believe that if No. 3 had not left the navigation dials it would never have happened. At the instant Mad Bjornsen was descending from one of his upward plunges, I heard No. 5's sharp outcry from the pilot-room:

"Magnetic vortex—eighty miles at ten degrees SW. Starboard batteries for God's sake!"

The last I saw of Bjornsen was his puffed figure alighting behind the *Arthane's* sun-reflector, then the steering broadside flung against me the right wall of the cosmograph room. I had no sooner recovered from the shock of the exploding rockets when the whole ship heaved up under me like inflated rubber. A strange tingling and numbness seized me as if I had encountered a charged wire. And above the thunderclap of exploding rocket-tubes, I heard the bellow of No. 5 in the pilot room:

"Give her everything astern—*it's got us!*"

It was No. 1's voice in the main speaking tube, communicating with all members of the crew, that prevented panic as we awakened to the reality of disaster.

"Caught in magnetic vortex," he reported, mechanically calm. "All power shut off for the present to conserve fuel. Vortex may throw us free, or break up of itself. Stick to your posts and don't worry. Notify me immediately if No. 3 is sighted in void."

CHAPTER II

"I'll Land You or Bury You!"

● As I rallied to the inspiring call of our captain, there was but one phase of our misfortune that persisted in depressing me—Barbara Weyden was hurtling with us to certain death. We had been prepared to die, but not with a woman among us. With heavy heart I looked down into the oxygen chamber, wondering when and how it would happen, and if it would be possible for me to tell her I knew.

While I gazed down in despair at the ungainly shoulders of No. 7 space suit, I was suddenly galvanized by an unexpected movement. The pressure lugs on the inner door of the air-lock were slowly revolving as some one operated them from the outside. I could hardly believe my eyes when the heavy, round door swung upward and a huge helmet pushed through. Mad Bjornsen had survived!

A cheer was raised throughout the ship when it was discovered that our capable, if eccentric, pilot had managed to get back into the ship. With Bjornsen back at the navigation dials, new hope sprang up in our breasts, and Frank Aldane ordered me to inform Earth of our misfortune, describing as best I could the nature of the space storm in which we had been caught.* Before I had well begun, No. 3's energetic reports were exploding in my ears, as Mad Bjornsen got back to work in the pilot room.

I scarcely know how to begin in recounting those first hours in the grip of the invisible space storm. The sheer immensity of our helpless whirling in the colossal, electrical cyclone staggers me. It soon became evident that even with Mad Bjornsen's piloting, Frank Aldane could do nothing with the ship, and with the gradual deadening of overstrained nerves, we gave up the last hope of reaching Earth alive.

In two hours of bodily and mental agony, we were carried hundreds of thousands of miles off our course into the sun. At last, foreseeing the danger of drifting so far from Earth's attraction that we would be drawn into an alien body, or worse, into the sun, Frank Aldane began repeated efforts to blow us free. Broadside after broadside of reserve tubes were fired without perceptible effect. We could not tell whether the gas explosions were neutralized by outer voltage, or the magnetic forces simply too strong for us to overcome. After half an hour of terrific bombardment, the rocket tubes again were silent, the only outer sound being a low hissing, or whispering, which we now know to be caused by the meteoric dust which generates the magnetism.

No. 1's report following the futile expenditure of fuel was anticipated. The reserve tanks of arthane were almost empty. We had only enough fuel left to break our fall upon an alien body, if we were fortunate enough to reach its gravitational influence before being drawn into the sun.

"Notify Aldane Hangars begin work on relief, ship immediately," Frank concluded his report.

A little later I watched concernedly the answer of Herbert Aldane as it crackled and sputtered in the micro-spectroscope. The cosmograph was being slightly affected by the electrical disturbances, but not enough to hinder the interpretation of the messages. Its immunity I ascribed to its utilization of the cosmic rays as an impulse medium, instead of electrical, or radio waves.

Not long after we had become resigned to our fate, Frank gave orders for pairing off into watches to permit sleep. As I anticipated, it fell to No. 7 and me to take care of the cosmograph and air generator. I must at last make known to Barbara my knowledge of her identity.

● One look into the open face of No. 7's huge, space helmet was enough to inform Barbara Weyden that I had discovered her. That look was also sufficient to convey my sentiments, for an expression of relief softened the lines of her strained face.

"You're the only one who knows," she whispered, when we had unhooked our speaking tubes to prevent the rest of the crew overhearing our secret. "You won't hold it against me will you?"

"Go to sleep," I managed to utter in a voice strange to my ears.

As No. 7 sank to the deck without another word, I heard Frank Aldane calling my number through the tube:

"Send message Earth," he relayed with an intensity unusual in him "—invisible body, somewhat larger than Moon, located 8,000,000 miles NW. Vortex now showing irregularity in rotation, and is heading away from sun. If vortex breaks up *Arthane* will be drawn into in-

*In 1956 the magnetic vortex, or space storm, was discovered to be caused by the friction of billions of molecular meteorites, revolving in small orbits between worlds.

visible planetoid. Crew all alive and seem well. Expect to report visibility of unknown body within next hour."

With the eagerness of revived hope, I transmitted the message to Earth, and turned to the lookout reflector. There was little change in the size of the sun, but Earth had dwindled to a small disc of pale green, the Moon a dim, bright point near by. More than a million miles we had drifted since our plunge into the space storm.

I had climbed down to the air generator to increase the hydrogen content when I heard sharp voices in the control room. Scrambling back to the cosmograph, I looked down the passage leading to the prow. Waiting tensely, certain that something was amiss, I saw No. 5 lurch into view, moving at a lubberly run by means of his tiptoes and the hand-rings attached to all the walls. A moment later Frank's voice reached me:

"Transmit Earth—Jacques Artois, French inventor and metallurgist, dies shortly after resuming watch in service department. Apparently, congestion blood stream." Then through the main tube, to all the crew: "No. 15 just passed on. Any member of crew noticing numbness in hands or feet, hang head down for several seconds to redistribute blood. No more digitaline."

* * *

"We're loose! Heigh-ho, wake up! We're loose!"

The screaming of a man gone temporarily mad with joy brought me out of deep sleep on the deck of the air generating chamber. I did not need to seek further for the cause of the commotion; I felt as one recovering from a long siege of virulent fever. No longer was there any centrifugal attraction pulling me down to the beams of the space ship's keel. With a mere flirt of my wrist I set myself afloat, drifting gently into a corner, conscious of an all-pervading quietude.

Throughout the ship the crew was rousing up with croaks of triumph that were meant for cheers. Frank Aldane and Mad Bjornsen were talking. Then order was restored, and No. 1 began broadcasting to us:

"Vortex has flung *Arthane* into gravitational field of unknown planetoid. We are more than ten million miles from Earth, hanging almost motionless in space, but beginning to drift gradually toward point northwest of sun, speed steadily increasing as sun's gravitation is overcome by closer planetoid. We will continue to fall into unknown world now faintly visible to the naked eye."

I had started up the steel ladder leading to the cosmograph chamber, where No. 7 was on watch, when No. 1's next command dashed my spirits:

"All hands remove space suits and assemble in main cabin for conference."

After that nothing could avert Barbara's discovery, and after the first shock of anticipation I decided that nothing unpleasant would come of it. Barbara had carried on like a true soldier of science. She deserved only praise from Frank Aldane or any other.

With a push of one hand I drifted back from the ladder as No. 7 came down hand over hand, like an acrobat on exhibition. In a moment we had unhooked our speaking tubes and were staring silently at each other out of the cavernous maws of the space helmets.

"You are in for it now," I finally said.

"I know, but what's the difference?" she rejoined, a little wearily. "Cuthbertson was afraid. If I hadn't found him out you might have had a maniac on your hands, and a useless air generator."

While we got out of the space suits in obedience to orders, Barbara told me how she had found out the yellow streak in Cuthbertson, and had arranged secretly to substitute for him when the individual oxygen tanks were charged in the chemistry department, just before the projection of the ship. She had been afraid that she could not pass inspection, but the deep space helmets had permitted her to, as well as her size and build, which were rather masculine.

But we forgot about the past when we faced each other in the coveralls which served as light uniforms aboard the *Arthane*. We were as drawn and pallid as a couple of resurrected corpses. It seemed impossible that a few days' strain could have wrought such changes.

Mad Bjornsen's heavy voice was booming down the passage from the control room before we had quite finished stripping off our harness. Thus urged to haste, we dived into the connecting tube like two inflated rubber dolls, pulling our airy selves along by the hand-rings.

Frank Aldane was just on the point of speaking to the haggard caricatures of men in the control room when Barbara wafted into view. No. 1's mouth remained half open for a count of three, while gasps and exclamations were heard from the rest of the crew.

"Good evening," Frank finally found voice. "A most unexpected pleasure."

He raised a restraining hand. "Your apologies are all anticipated, Miss Weyden," he said, kindly. "I regret that the cruise has not proved more enjoyable. So Cuthbertson lost his nerve? I rather suspected him, but he was such a demon in the troposphere."

"I wanted to go so much," she begged.

"And it looks as if you had your wish," Frank said with a faint smile lighting his worn face, as he glanced about him at the circle of ghastly, fatigue-shrunken faces. "Allow me to introduce the real identity of No. 7," he concluded.

There were various reactions to the discovery that Barbara Weyden had stolen a march on us, but Mad Bjornsen's most attracted me. He said nothing, neither did he evince surprise by look or action. From where he sat, or rather hung, before the intricate navigation instruments, his bright, amber eyes glowed and twinkled with a light that at one moment seemed amusement and the next exultation. Somehow I could not help but feel insulted by his intent inspection of our stowaway. As far as I knew Mad Bjornsen was my friend and Barbara's, yet beyond the arm of the law, I discovered something menacing in his easy composure, his excessive daring and the monstrous strength for which he had been noted at Aldane Hangars. And I could not help but recall with a shudder his wild ideals of the superman, by which he would revolutionize society.

It was the sharp outcry of No. 17 that recalled me to the problems before us. Bruce Castleton (No. 11) had gone to sleep while we talked—the sleep of no awakening. He drifted gently to and fro in one corner of the control room, where he had been holding himself by the hand-rings a moment before, looking down on us with unwinking eyes and lax jaw.

Frank's examination was swift and final. "Another one," he announced, grimly. "Our best astronomer.

Seventeen, remove the body. Replace in space suit No. 11 and stow alongside No. 15 in service channel 45 W."

"What has just happened needs no comment," Frank resumed when No. 17 had returned from his sad business. "Provided there are no further interruptions we will proceed with the business of this meeting.

"Our reckonings show that we have several days falling ahead of us—the end an unknown world which appears to be habitable with the exception of spectrum line 85, an unknown substance. From now on, any idea of returning to Earth in the *Arthane* is madness. Our last chance is this planetoid where we may survive until my brother Herbert reaches us with the relief ship.

"I say '*may* survive.' To be perfectly honest we have scarcely enough arthane in the tanks to break our fall on this alien body, if we live long enough to reach its atmosphere. I'm being optimistic when I say that we have one chance in a million to land safely. But I'm going to hang on until that millionth chance is gone, and I expect every one of you to do the same. We have proved the possibility of space annihilation. Earthman's future is interplanetary. It will take time, of course, but the trail has been blazed, and progress in this field is inevitable. I think that we who are soon to pass on, or out, ought to do it with service to mankind. Our work is done whether with the service to mankind. Our work is done whether we live an hour or a century longer.

"But after all it is up to you individually whether the hardships of duty are continued on the *Arthane*. Any one who prefers to quit now may consider his services sufficient, with my heartfelt gratitude for his aid thus far." He paused, and concluded, gruffly: "Well, what do you say?"

"We stick! We're with you, One! Land us on that planetoid!" came the quick, irritable cries of the crew.

"From the bottom of my heart I thank you," said Frank, his lips quivering with feeling. Then his whole figure was tensed as his eyes grew grim and hard. "Gentlemen," he cried. "I'll land you or I'll bury you deep!"

CHAPTER III

The Landing

For eight days we fell through the void into the unknown world. There were no more pow-wows in the control room. A few hours after our conference we were falling with such rapidity that any attempt to relax save in stupefied sleep would have been worse than futile.

On the fourth day after our release from the magnetic vortex, the body into which we were falling like a meteor assumed definite form and color, a tiny moonlike disc on the outer edge of the solar system, pale yellow in the center, tinged with pink that formed dim mottles. Earth long since had disappeared, the whole heavens having changed with the exception of the sun and a few major stars.

At intervals that grew more and more irregular, No. 7 or No. 1 notified Aldane Hangars of our position, speed of falling and the changing aspect of the heavens. Herbert Aldane kept replying with encouragements and assurances that everything possible was being done to hasten the launching of a relief ship, but his optimism soon ceased to have any appreciable effect on us. What might happen a year from the present meant little, when death had become an accepted eventuality. I believe Frank Aldane and Mad Bjornsen were the only ones who retained a real grip on life; the rest of us subsiding to a stupid, spiritless lethargy.

Our digestive tracts must have shrunken in proportion to our outer flesh during those awful last days. Though the concentrated food tablets nourished us as no bulkier foods could have done, the gnawing hunger that incessantly burned in our vitals was not appeased, nor were our thirsts quenched by the scanty rations of water, which in spite of every economy dwindled rapidly.

"We won't know when we go," I recall Barbara moaning once. "We're dying by inches."

Sometime during the fourth day No. 17 did not awaken from his turn of sleep, and another space suit became a bier as Maurice Howland was laid away in service channel 45 W, which Mad Bjornsen now referred to as "the morgue." It was Barbara who informed Earth of our third casualty, she being as proficient on the cosmograph as any of the crew. After she told me of the tragedy I recall enumerating the six that remained: Frank Aldane, Mad Bjornsen and Dale Sutherly in the control room; Clyde Marmouth, Barbara and myself in the subsidiary divisions.

The last day of falling is almost a blank. We were then shooting through the stellar darkness like a comet, and an encounter with dense atmosphere would have caused terrific heat friction. I no longer walked or floated from air generator to cosmograph; I crawled, talking to myself like a madman in my efforts to stay awake.

Not until the last few hours was I able to rejoice at the rapid enlarging of the stellar body that meant life or death to us. Like a wooden man I stared at the great globe, whose color tone had become predominantly red as we drew nearer the thin stratum of atmosphere. But even then my chief concern was for Barbara. Crouching over her as she slept, I would exult in miserly delight over the fact that I was standing twice her watches, and she did not know it.

At 5,000 miles altitude the remainder of our water supply was divided among us by Mad Bjornsen. Even he, giant of the crew in thew and nerve, was staggering, his voice low and husky, as he implored:

"Drink! No. 1 orders drink. Got to revive, got to wake up. May need to use parachutes. We strike air in less than an hour!"

Herbert Aldane's response to my message informing Earth of our approach to the outer atmosphere of the planetoid remains vividly in my memory since it was the last I was to receive via the *Arthane's* wonderful instrument of communication:

"Relief ship well underway," I read in the glow and throb of the ray streams. "Should be finished six months. Billion hearts with you here. Carry on!"

Directly after that I fainted, knowing nothing until aroused by Mad Bjornsen on his rounds.

"Put on gauntlets and close helmet," he called through my eye-piece holes. "Turn on oxygen tank and be ready to leave ship in air if we fail to countercharge."

As he dived back into the passage to the control room, No. 1 called through the speaking tubes:

"Lookout for countercharge. Stratosphere eighty miles down!"

We dared not enter the revolving shock absorbers for fear we could not extricate ourselves in time if it were necessary to leave the ship. The recoil chairs must suffice to break the shock. I had no sooner tensed myself in my own chair before the braking batteries crashed ahead, throwing me against the forward wall. The great ship hesitated, quivering from prow to stern, then plunged on as I fell over the manhole leading to the air generating room, intent on joining Barbara as the last act before the probable wrecking the ship.

No. 7 was clinging to the hand-rings before the kronite-paned window on the starboard side. Fixing my attention on Barbara's space suit numeral, I strained down the ladder against the varying shock of the braking batteries, now thundering with increasing power as Frank Aldane increrased the detonating sequence, using the last of our precious fuel supply in the effort to break our fall.

Barbara did not turn or speak when I at last joined her at the window. She merely pointed outside. The planetoid was no longer a distant sphere. Only an illimitable haze could be seen ahead. Behind and all about the stars had dimmed markedly in a field of deep azure. Below our lookout port, one of the *Arthane's* great, collapsible wings, now spread for contact with atmosphere, gleamed like a colossal sword blade.

We were still kneeling enthralled before the window when No. 5's voice reached us through the tubes above the rocket thunder.

"Air!"

● Almost simultaneously with the triumphant shout a sweeping, steam-like hiss sounded outside as if we had struck water. The roar of wind must have been cyclonic to have been audible through the insulated konel plates of which the ship was constructed. A sickening dipping and swaying set in as the stabilizing fins bit into the thickening atmospheric gases. Then, above the awesome symphony of wind and rocket explosions, No. 7's scream penetrated my ears:

"Look!"

Lo, it was sunshine that we saw beneath us, the first in many a day of darkness, and in the flash and scintillation of that wondrous light and warmth were vast masses of wine-colored clouds, floating in what seemed to be a gentle wind. It was a new world—land in the sea of space beyond the gravity of Earth.

Mad Bjornsen's bellow crashed in our helmets. A hoarse voice answered. With a slight shock the *Arthane* sped on as the forward batteries fell silent.

"No more gas!" the news was relayed from the control room, and we heard Mad Bjornsen's frantic yell: "Level off those fins. It's a dead-stick landing—three thousand feet down and eighty miles an hour. Hold her, One!"

"The fins will never do it!" cried Frank Aldane. "Get the crew out in parachutes!"

"Parachutes, hell! They can hardly move a leg. Ease her off with all the surface you've got. We won't hit hard in that gravity."

We could hear no more of what was said. I saw a dizzy uprush of strange, rainbow-hued terrain. Still water gleamed between the blurred summits of low hills. Then a scream in the control room was cut off by a grinding shock, a smiting darkness wheeled with fire . . . I seemed falling and falling through inestimable space, gasping for breath and feebly beating the air to arrest my descent.

"Are we the only ones?" It was Frank Aldane's voice, strained and hesitant, as if he stifled groans of pain.

"No, Marmouth is only shaken up, and I think Harbin and Miss Weyden will pull through," replied the deeper, steadier voice of Mad Bjornsen. "With the air dead in the ship and the keel seams started I couldn't open their suits. A crack-up at that speed on Terra would have made sausage of us all."

"And the air-lock—you're positive it's jammed too badly for use?"

"Yes; I can't budge the inner door. I'll knock out a window if you think 85 is harmless. The stuff surely is in the air by the color of Sutherly's last test."

There was a pause before Frank spoke again, low, haltingly: "It's all the same to me, I think. Go ahead and smash out that window on the starboard side. Get a sledge from the service room. I'm going out."

"Better not," Bjornsen objected, sternly. "You're dying on your feet already. A move like that will finish you."

I heard labored breathing in the palpitant silence, then —"Never mind. I'm done for anyway. Get the sledge. I'm still master of the ship, and I'm going to be the first to walk on the new world."

Again labored breathing, followed by Mad Bjornsen's growl of assent.

I could hear the scrapings of a space suit on metal walls, the measured sigh of deep breathing through the amplifying transmitter valve of the speaking tube, then footsteps returning from the service room and the ear-splitting crash of Bjornsen's first blow on the kronite pane, which brought me fully to my senses. I had been overhearing what went on in the control room as one who lies abed in the morning, half awake.

For several seconds I did not move so much as an eyelash. I feared to ascertain my injuries. I lay listening to the sledge blows, the heavy impacts emphasizing the soundlessness, the motionlessness, the utter immovable inertia that pervaded me and my surroundings.

Moving first an arm, then a leg, then all members, I was startled by the ease and swiftness of muscular response. I got up so quickly that it seemed I had no weight. An instant I stood, stunned and bewildered, then a sudden giddiness assailed me, which brought me once more to my back. It was a reaction to the days of falling. I was becoming adjusted to motionlessness on the surface of the planetoid.

The dizzy spell passed away presently, and again I got to my feet among the wreckage of apparatus scattered about the sharply tipped deck of the air generator room. It was then I caught sight of Barbara, lying a few feet away in the trough formed by one wall and the warped deck.

"Barbara! Barbara!" I cried.

Then the heavenly relief of her faltering reply:

"I'm all here—I guess."

Leaping to her side, I bent over the mechanical ear in her helmet, shouting rather crazily: "We're alive! We're on the new world!"

She seemed to arouse fully after that. Sitting up against the wall with my help she asked in faint alarm:

"Have you seen it?"

"You mean am I afraid to look?"

"Yes," she whispered.

"We'll look together," I said, proud that I was not afraid of what we would see beyond the walls of the space ship, and proud that I could act as the protecting male for such an accomplished young woman as Barbara Weyden.

We crept to the starboard window a moment later, like awe-struck pilgrims before a sacred shrine.

The first impression we got of the new world was the sunlight. Though dim, it was not gray as if filtered by clouds, nor was it soft like dawn or twilight; it was more prismatic, or translucent, as if shining through a screen of flying dust somewhere high overhead. One who has seen the faint tinge of red suffusing Earth during an eclipse of the sun, can best visualize the sunshine of the planetoid.

It was a wine-colored world, beautiful, yet unreal, poisonous, almost, to our Earth-nurtured senses.

● There were two low mounds directly before us, the ship having fallen at the foot of a third mound. Deposits of limestone, mingled with large, calcified shells, covered these hills, causing a dominant tone of white. In the ravines between the mounds, which stretched as far as we could see into the background, were dense thickets resembling the coral and seaweed formations at the bottom of the sea. But it was the ominous stillness of the scene that was most disturbing. Rare beauty was there in the landscape of the planetoid, but it was a beauty that seemed the catalyst of an unnameable menace.

The sudden cessation of sledge blows in the control room called our attention from the window. We heard Mad Bjornsen call out:

"Heigh-ho, crew!" A muffled voice from below responded—Clyde Marmouth in the service department, then Barbara and I sang out our numbers.

"Stay where you are," were the orders. "One is going out. Breathe from your oxygen tanks until I find out about this atmosphere."

A slight chill had crept in upon us from the control room, now open to the atmosphere of the planetoid. With unusual anxiety we could hear Bjornsen and our wounded skipper talking. No. 3 still was trying to argue Frank out of venturing forth in his injured condition, but he made no headway. As he climbed out of the broken porthole we heard Frank say:

"New world, eh, Bjornsen? No, keep your hands off. I can walk alone. Good thing the gravity is light."

His voice died away in exultant chuckles as Barbara and I turned back to the window, pressing helmets against the pane in our eagerness to catch sight of the man who would first walk on alien soil.

Weirdly incongruous in that fairyland of coral and lime, the space suit of No. 1 lurched into view. He was heading for the mound on the left, his feet barely touching the ground, arms locked tightly over his abdomen. Not then knowing the real seriousness of his injuries, we could not entirely appreciate what a stupendous feat of mind's mastery over matter he was performing.

Halfway up the slope he stopped and sat down with such slowness that it seemed air pressure was buoying him up. His hands moved to the front of his helmet, and he unscrewed the eye-pieces. He was testing the air!

It was Frank Aldane's last voluntary movement. He collapsed immediately afterward, just as the hulking figure of No. 3 burst into view and bounded up the mound. I called to Barbara and we dived into the passage to the control room, reaching the other end to find Marmouth just ahead of us.

Unmindful of the alien turf, we hastened up the hill through the dim, reddish sunlight. Mad Bjornsen was kneeling beside No. 1 when we came up.

"The air didn't get me," Frank was saying. "Air's all right, but rare. No use to bother with me. Hope you—" he gasped and seemed to faint.

Mad Bjornsen was rapidly loosening the front of his helmet, and we followed his example while we watched the pale face of our commander for a sign of returning consciousness.

My first breath of air on the planetoid was searing cold, as if I were on a mountain peak, but it was refreshing, and the coldness appeared to be more a result of the scanty oxygen content.

Quite gently, with an ease due as much to gravitational conditions as to unusual strength, Bjornsen picked up No. 1 and bore him back into the control room of the grounded rocket ship. Here we pulled off the dying man's helmet and space suit, aghast at the injuries we found.

"He's got the worst of it with Sutherly," muttered No. 3. "They were standing right where the ship hit first."

Just before he died Frank Aldane opened his eyes. He seemed to be sympathizing with us, as if in death he were more fortunate. "Goodbye, castaways. Guess I landed you in Hades instead of—"

He never spoke again.

CHAPTER IV

The Tyrant

● In the exhausting reaction following the clearing of the main cabin, death might have taken even greater toll of the *Arthane's* crew had it not been for Mad Bjornsen. Only his brutal initiative could have prevented us from sinking into a stupor whence none might ever have awakened.

"Get out of those space suits and give one another first aid!" he shouted at us in a tone that brooked no dalliance.

No serious injuries were found during the hasty examination. As soon as the last scratch was bandaged, we were ordered to inspect the ship from stem to stern. What we found and reported to Bjornsen steadied us somewhat. The *Arthane* would never fly again. And most calamitous of all was the damage I found in the cosmograph room. Our last link with Earth had been broken; we could not hope to guide the relief ship with messages.

"I knew this before I ordered the inspection," Mad Bjornsen addressed us. "But I see you have come to your senses, so the time wasn't wasted. We are here for a year at least, if the relief ship ever locates us. But our circumstances could be worse. With the food tablets left by the deceased added to our own remaining supplies we ought to be able to exist for several months, or until we make a thorough survey of living conditions here.

"But the chief reason why I'm keeping you awake is the alien element in this atmosphere. So far it appears harmless, but it will take longer to judge definitely. If we begin to feel bad effects we must invent some kind of filter for breathing. Meanwhile we had better look for drinking water. By that time we may be sure as to the nature of 85. Follow me."

Outside the ship, drawing the cool, rare atmosphere deep into my lungs, the qualms of fatigue became less noticeable. Again I was able to think logically, to appreciate our first venture into the new world.

The *Arthane* had fallen on the summit of a prominence considerably higher than the surrounding mounds and ridges. As evidence of Frank Aldane's superb piloting, we had struck glancingly, plowing our way with gradually increasing depth to the foot of the slope. Such a fall on Earth, broken though it had been by braking rockets and spread wings would have telescoped us. On the planetoid only the landing skids and keel had suffered.

Climbing to the hilltop under which the wrecked ship lay, we huddled together in dismay with the exception of our new leader. Under a red-tinged sun, the only visible stellar body, stretched an endless profusion of white mounds and ridges. Between these monumental promonotories rose the monster coral polyps. It was like a fantasy in oil by some super-imaginative artist.

"The new world!" Mad Bjornsen suddenly exclaimed, spreading his arms to the scene. "Ah, freedom! Beauty! Room to live!"

While we stared at him in fear of his mind, he turned solemnly to us, again apparently a master of his emotions:

"Bear witness, space sailors," he said. "In behalf of the man who first set foot upon a new world, I, Serge Bjornsen, acting commandant of the Aldane Interplanetary Expedition, do hereby pronounce the name of this planetoid Aldane World, and may it so appear in all future chartings of the void."

In view of what was to happen, Bjornsen's respect for the memory of Frank Aldane proved a poser; but we later concluded that Frank Aldane had been the one man in the world whom Bjornsen considered an equal.

It was Clyde Marmouth's exclamation that aroused us to a manifestation of life in the exotic fastness hemming us. Looking in the direction he indicated, we sighted three specks against the blood-red horizon. They grew rapidly larger, flying at considerable altitude above the white mounds. No distinct shapes were perceptible, but while we watched intently, the creatures soared higher and higher, until lost to view in the pale rose mists of the zenith.

"There's life here," Bjornsen burst out, "and I'm going to find out what it is. Harbin, you and Miss Weyden stay by the ship and see that nothing gets in. Stay awake if you do nothing else. Marmouth will go with me, and we'll try to find water before we come in. If any one needs help, he'll fire a minimum blast from the arthane hand-guns."

I wearily motioned assent and watched Bjornsen and Marmouth set off down the slope in the direction whence the flying creatures had been seen. Not until their buoyant, balloon-like figures had disappeared in the polyp brakes did either of us speak.

"I don't trust Serge Bjornsen!" Barbara exclaimed, nervously. "Maybe it's my imagination, but somehow I feel we'll have trouble with him."

"I'm afraid we're all subject to hallucinations," I groped, trying to comfort her. "I hope your fears are nothing worse than nerves. You know that if Bjornsen tries to carry out any of his far-fetched social ideas you can count on Marmouth and me to defend you with our last breath."

"Let's go back to the ship," she murmured, shuddering a little.

During our awkward, though airy, descent of the hilltop, we obtained our first good look at what we were afterward to call, somewhat erroneously the "sky-horses."

A startling whir of wings and a buzz like the vibration of a rattlesnake's tail drew our attention to the reddish sky of the planetoid. Directly above the ship a strange, winged creature was hovering, as if looking down at us with invisible eyes—invisible in that there were none of the usual visual organs. Drawing our automatics, which were the only accurate death weapon we carried, we prepared to defend ourselves. But the curious being seemed to be peacefully inclined. It hovered a few minutes above us, then swooped down, alighting a few hundred yards away on a great branch of the coral growths.

The body must have been fully eight feet long, and it consisted of a translucent and iridescent substance resembling protoplasm. The wings were of enormous spread, in shape and color like those of a dragonfly. Two, short antennae, with ball-shaped tips, protruded from the browless, yet beautifully rounded forehead. The buzzing we had heard seemed to issue from the antennae. The long, shapely body, shot through and through with tints that changed prismatically with each slightest movement, terminated in a unipedal appendage, much like the flipper of a seal.

These details were noted before the being suddenly lashed out with its awe-inspiring wings, sprang up from the polyp branch and settled quickly out of sight in the tangle of the rainbow-hued thicket. Pistols still drawn, we cautiously approached the shadowy hiding place of the monster, but we found nothing but a cavernous grotto which seemed to lead down into the ground for considerable distance.

Deep in discussion of this unquestionable evidence of interplanetary life, we returned to the ship, sat down on the shady side, and there fell fast asleep, probably in the middle of a sentence, so tired were we.

The shock of cold water in my face awakened me. I staggered to my feet. Mad Bjornsen was grinning at me. They had found water.

"Lakes of it!" he exulted. "Yellow with phosphorous, or something similar, but it won't kill. We can survive, Harbin, and we're standing the air fine."

● It is useless for me to attempt a literal description of my sensations upon first awakening from a night's rest on Aldane World. I awakened, as if from an appalling dream, to find my visions a grim reality.

Not until I moved was I reminded that I lay in the control room of the *Arthane*, that sometime before Mad Bjornsen had told us to get out our sleep while he watched. All around me a dense darkness weighed down; a darkness not black, but of a peculiar purple, if by darkness, I may convey the idea of an all-pervading, blinding color.

I say that the darkness was blinding, yet there were fleeting illusions of clarification. Objects seemed to loom up, then vanish, before my straining eyes. Coupled with the lightness of movement, caused by gravitational conditions, there was little to remind me that I was really alive until I reached out and encountered someone's space suit, which proved, after feeling inside the helmet, to be Barbara's. She was sleeping soundly.

To my dying day I shall ever recall with a shudder the night sky of Aldane World as I first looked upon it from the cabin of the wrecked rocket ship. Of a lighter purple than the ground outside, it appeared to hang, or float, not fifty feet above me. A few stars gleamed redly between the wisps of pale mist that moved hither and thither as if on extremely high air currents. I must have stared for several minutes at the unusual firmament when a series of odd noises drew my attention to the ground. Somewhere among the shadows were creatures such as Barbara and I had seen during the day.

With almost magical suddenness a dozen or more ethereal shapes were revealed, all moving silently on their rubbery flippers, emitting as they went the queer, irregular buzzing. Directly in front of my position, about twenty yards away, they all stopped as if by command.

On the point of crawling out for a closer inspection, I was petrified momentarily by the appearance of a far more fearsome visitation that rose out of the purple darkness not far from the motionless monsters. Patently it was a man; yet such a shadowy, groteaque caricature of a man that I was almost convinced of his super-mundane origin.

The man-like figure was stealing toward the shapes that first had attracted me, as if they were his prey. At a little distance from them, he suddenly dropped to his hands and knees, while from his lips issued an imitation of the sound which the other creatures had been making, though they were now ominously silent.

Slowly the flying creatures, swaying and wobbling on their solitary legs, began circling the crouching man, while they set up a buzzing not unlike the noise in a telegraph office. With no apparent warning they closed in, as if to overcome the enemy by sheer weight of numbers. There was a muffled sound of blows, an angry outburst of buzzing, then the winged monsters of the planetoid scattered to right and left as the giant figure of the man rose triumphantly in their midst.

Low, throaty laughter apprised me that the victor in the strange duel had been no other than Mad Bjornsen. He had removed his space suit, I saw as he came bounding toward the rocket ship. His massive, blonde head and hulking shoulders were oddly malformed by the purple shadows; in fact, he was a far more fearful spectre than the alien beings he had struggled with.

"Who's there?" he called out, sharply, seeing my dim face in the broken port.

"Monte Harbin," I replied with bated breath. "For God's sake, what have you been doing?"

He walked up to me, and I swear his face had developed the assymmetry of a fiend.

"Don't be alarmed," he chuckled. "I was merely exercising my superiority over the other inhabitants of Aldania."

"The other inhabitants?" I faltered.

"Verily; stay up and get acquainted with the horsemen of a new apocalypse. I'll be awake in one hour, and I'd better not find you asleep!"

He laughed nastily as he dived into the control room, where I heard him rustling about a moment before all was quiet again.

I pass over the details of those hours of mental torment that I endured after witnessing Bjornsen's awesome battle with the sky-horses and his allusion to his superiority. Well I recalled his life philosophy, that of the right of dominance of the superman. Here he might carry out his ideals by forcing all manner of unpleasantness upon us. And there was Barbara to complicate matters.

The coming of the red dawn did not relieve my suspense, but rather heightened it as the survivors crawled out of the wrecked ship to gaze upon the alien wonders of the new world. Little was said that morning until after we had eaten, or rather, had taken our medicine. Marmouth ignited a heat-cartridge taken from the lining of his space-suit, and we steeped the food tablets in water. Bjornsen seemed highly amused by our greedy gulping of the concoction, and we were not long in learning why he drank so sparingly of it when our stomachs promptly and violently turned inside out.

"Hyper-sensitivity of contracted stomach walls," Bjornsen diagnosed our malady. "For three scientists on the verge of eternity you wear the cap and bells very becomingly."

Such callous amusement at our distress was enough to set off Clyde Marmouth, the English physicist, whose temper was only exceeded by the redness of his hair. He growled a sullen retort that did not please our captain.

● Bjornsen's amber eyes hardened. He seemed to draw himself together like a tensed steel spring. "Hold your tongue, Marmouth," he snapped. "What I have to say is exempt from censure in this quarter of the universe, by right of brain and fist. There isn't any police force or standing army between you and me now!"

Barbara and I exchanged glances, and I tried to catch Marmouth's eyes with a silent warning. Before the aroused Englishman could speak again Barbara had endeavored to relieve the situation with a pleasantry concerning our petty bickerings as appropriate for marooned space explorers.

But Mad Bjornsen was not to be placated.

"Wonders are relative," he turned slyly to Barbara. "After what we've seen the miracles of infinity become the proverbial duck-weed on the river. When intellectual ambition is sated we return to more primal ambitions, to personal prowess, cabbages and women."

"But I don't wish to be considered a woman," Barbara parried good naturedly. "I've taken my punishment like a man, and I want to play the part of a man until the relief ship arrives."

Bjornsen tipped back his great head and laughed loudly. It was not a comforting sound, and his explanation for his pessimistic stand was distressing.

"This pinch of cosmic dust is not even visible from Earth," he declared: "Moreover, it's invisible two million miles this side of Earth. Besides, we're moving in orbit. Before Herbert Aldane is afloat we'll be ten million miles from the location we cosmographed."

"A bloody rotten place to spend the rest of one's days," Marmouth sulked.

Bjornsen had risen quietly to his feet, towering over us like a demi-god. There was a look of grim determination on his bearded face.

"None of you seems to appreciate this little fairyland of the solar system," he announced abruptly. "I feel obliged to take possession, lest we flout the kindness of the gods. Consider yourselves subject to my will from now on."

His eyes slowly traveled from face to face as he studied our ominous silence. There seemed utter contempt in his voice as he concluded:

"Make your resistance as brief and decisive as possible."

Marmouth was first on his feet, pistol drawn, while Barbara and I quickly supported him. But with three deadly weapons staring him in the face, Mad Bjornsen still maintained his trance-like immobility.

"Well posed," he sneered, "for three who hold something in their hands that might make a few dents if thrown hard enough.

Marmouth and I must have faltered almost simultaneously. Pointing my weapon to one side, I squeezed the trigger. There was no report. With sickening dread I noticed that the trigger moved sluggishly as if clogged with dust or rust. Marmouth also had failed to fire his pistol, while Barbara was looking fascinatedly at hers, rubbing the steel with a sensitive fingertip.

"What have you done to these pistols," Marmouth cried out furiously.

"That question could only be answered by the one who made this little watering place for space sailors," grinned Bjornsen.

But Barbara had made a discovery.

"Look!" she cried suddenly. "85!"

We closed in, oblivious to Mad Bjornsen in the horror of an undreamed of menace. Barbara was pointing to her pistol, staring at it as if mesmerized.

"A kind of verdigris," she whispered. "No metal can exist in this atmosphere!"

The appalling truth unhinged me for a moment. I swung on Bjornsen.

"You knew this!" I accused.

"I take advantage of natural phenomena," he retorted, then to all: "Are you satisfied, or must I subdue you with brawn as well as brain?"

No one answered. We were too confused to speak, and to attack him barehanded would have been madness.

"Very well," he resumed, confidently. "I think you have done all you can for the present. Now I'll tell you something more about 85. I discovered the signs of it last night. This verdigris, as Miss Weyden terms it, has saturated the entire ship, inside and out. It is a kind of actinic rot, a disintegration of metallic atomicity in conjunction with light rays. My investigations, made while you slept, lead me to believe that not a trace of metal as we know it exists on the surface of this planetoid.

"At the rate of decomposition now going on in the plates of the *Arthane*, she will be a heap of dust within a month. Furthermore, the relief ship that lands here, or cruises for very long in this atmosphere will not be able to get out again. Now you may understand why I've staked my future in Aldane World. We are here for life, and I repeat that from now on, to you as well as the sky life of this world, I am God."

"Traitor!" gasped Barbara, stupefied by the enormity of his insinuations.

"You'll regret this if it's the last act I do in life," vowed Marmouth, and I mumbled some echoing sentiment which I have since forgotten.

"Meanwhile," Mad Bjornsen smiled indulgently, "we're going bathing in the prettiest little cove you ever laid eyes on. You see my kingship isn't going to be entirely painful. The rub will be that you play with my permission, that you live with my brain and your legs. Oh, you'll live all right because you hope to be rescued or to kill me. As to how you shall live, we'll take that up later. Lead on to that water we found yesterday, Marmouth, and quit that grouching. It won't get you anywhere under Serge the First."

CHAPTER V

The Revolt

● The first few days of our involuntary servitude to Serge Bjornsen, interplanetary conquistador, were disappointing as to social innovation and encouraging as prognostications for the future. Competently directed by our egomaniacal captain, we began investigations much as if nothing had happened to alter our relations. However, we could do nothing without Bjornsen's approval, not even eat; the penalty for disobedience being confiscation of our food cases.

By noon of the first long day on the planetoid we had removed the telescope and gearings from the observation room in the hope of somehow preserving the mechanism from the destructive atmosphere. But our work was useless. The lenses already had been ruined by the tiny webworks of the mysterious "85." By this time even the buttons on our clothes had been affected. Nor did Mad Bjornsen permit any experimental steps in counteracting the decay. He seemed to require nothing earthly for promoting his schemes.

As deduced from the crude calculations possible without instruments, we discovered that we had landed somewhere in the torrid zone of the planetoid. We estimated that the daylight lasted almost twenty hours, the night being about equal at that season. A temperature averaging seventy degrees Fahrenheit prevailed.

There was no wind in the surface layers of atmosphere, and the only perceptible clouds were so high as to be almost always invisible. The small inertial mass explained the rarity of air; Aldane World being somewhere between Earth and Moon in size, though I believe its atomic weight was far greater, owing to the presence of "85" in the soil.

Since 1943 a stellar body had been mathematically located between Earth and Venus. However, so irregular had its orbit been that nothing definite had been known concerning it. Also, the low reflective quality of the atmosphere had made it invisible to the telescopes. We all believed it was this body on which we had fallen.

"An ideal world," was Mad Bjornsen's confident declaration. "We need only find food to take the place of the food tablets when they are gone. And as a last resort we may be almost certain that a dissection of the sky-horses will reveal something edible."

The rest of the day was spent in an unsuccessful search for more of the "sky-horses." We did not see any of them, but found many signs in the numerous entrances to the caverns that seemed to honeycomb the vicinity. We decided that the animals were either nocturnal in their habits, or else were afraid to come out because of our presence. Though we had confidently expected to find other forms of life, the nearest we came to it was when we unearthed some very weird fossils. Even the water was devoid of any life that was visible to the naked eye.

That night we were briefly overjoyed when we discovered a "moon" in the purple sky. Just what planet or satellite the pale pink disc was we could not decide, but it was a cheering reminder of our own Moon of faraway Earth.

Not long after our discovery of the moon we were seated in the control room of the rocket ship, discussing the situation, when the shadowy head and shoulders of Mad Bjornsen loomed up in the broken porthole.

"What do you want?" I asked, with more boldness than I felt.

"Just dropped in to pay my respects to the citizens of Aldane World," he chuckled.

"Respects?" sniffed Barbara.

"Or what have you," he shrugged, "but enough of this. I'm bringing you company tonight."

"Company?" we chorused.

"Yes; a couple of 'sky-horses, or more properly 'sky-colts.' I'm reasonably certain that these apparently-stupid creatures have a language—a code language, if you please, and I want to incite them into using it under observation."

We were incredulous.

"Oh, nothing positive," he disparaged. "But I've detected what I believe to be a delicate differentiation in the sounds they make with their antennae. I want you to listen at close range and see if you can associate any of these buzzing sounds with exterior conditions. You might even get them to conspire with you against Serge the First."

His irony was lost on us. The idea that the sky-horses could communicate was stunning, the scent of a scientific discovery outweighing our personal grievances.

Two hours later we were plunged into an absorbing investigation. Calling from the darkness where the strange buzzing of the Aldanians could be heard, Mad Bjornsen ordered us outside. As we lined up not far from the entrance to the ship, we could see the prismatic shapes of two creatures under either of his arms, while behind him wobbled a surging mob, flapping their great wings and filling the air with crackling messages.

There seemed a likelihood of the creatures closing in on us, but Bjornsen did not give them time as he quickly deposited his burdens inside the broken window and disappeared with a tremendous bound.

We tumbled back into the control room none too soon. Outside, the sky-horses beat and scratched at the fuselage with their wings, trying to get at their captured young. But since our prisoners made no loud complaint the disturbance soon quietly down to a desultory buzzing.

In the dull glow of an ignited heat-cartridge the two weirdly beautiful beings were lying where Bjornsen had dropped them. It was our first really close look at them, for Mad Bjornsen had forbidden us any night adventures.

● The two were almost the same size—infants, I assumed, about as large as full-grown seals. The tail consisted of a tough, horn-rimmed flipper, shaped like an inverted cornucopia. This served to propel them on the ground, and in the air it was spread out to resemble a bird's tail, acting as a flight stabilizer. The wings were similar to a bird's only in their compactness when folded, which enabled them to move easily in their underground habitations. Organs similar to gills were hidden under the translucent membranes near the head.

"It looks to me as if they existed on air," said Barbara.

And a close examination of the "gills" seemed to bear out her theory, for there were none of the usual orifices connected with a digestive system. We did not doubt that the alien element in the atmosphere had had something to do with their development, if it was not entirely responsible.

The inadvertent slipping of my fingers as I turned one of them over aroused us to disturbing evidence of their intelligence. As I regained my grip with a jerk the captive vibrated his antennae angrily. His buzzing was answered instantly by the crowd outside. Repeating the experiment several times, we decided beyond the shadow of a doubt that the sky-horses had a communicative system of some kind, probably similar to telegraphy. Relative to this, it was scarcely a pleasant feeling to realize that the apparently unreasoning sky-horses might be studying us more deeply than we studied them.

For an hour or more we experimented with the creatures, discovering that the light of the heat-cartridges blinded them, but that they were conscious of our presence in either light or dark, signifying an exceedingly mystifying group of senses alien to our own, at least, in their functioning, or brain interpretation. How they could see at all was not clear, but we guessed that the optical organs were imbedded in the translucent membranes.

Near midnight, which time we could tell by the position of the stars, the buzzing of the sky-horses surrounding the ship apprised us of Mad Bjornsen's return. He strode boldly up to the conning port, shoving aside the winged giants in his path as if they had been so many court fools before his august majesty's throne.

"Find out anything?" he asked.

Marmouth volunteered to reply, controlling his temper in a manner hardly characteristic of him.

For some time we discussed the Aldanians relative to their intelligence and their day blindness, which seemed to explain why they retreated into the caves, or "catasombs", as Bjornsen called them, at the break of dawn. However, we recalled seeing several of them just after landing, whereas thereafter we had seen but one in daylight. This seemed to show that they either had known of our coming, and were out to see us against their usual habits, or they had become frightened and would no longer show themselves except when their visual senses were undimmed by sunlight. The idea that the ones we had seen in the daylight were spies and special messengers on perilous "night" duty was an interesting one.

However, our conference with Bjornsen never got beyond the formal so far as we were concerned. It was an exchange of information valuable alike to tyrant and oppressed. When Serge the First returned to his royal couch somewhere in the purple darkness, our chilly "good

nights" revealed the animosity smoldering beneath the overtones of intellectual amity.

Clyde Marmouth, the irascible Englishman, had sworn to "kill or be killed" when he struck back at Mad Bjornsen. But it was the last part of that famous battle cry of the bayonet which applied itself.

The incident of his tragic attempt to overcome the mad Swede came several days after the burial of our dead in the little valley beside the wrecked rocket ship. We had gone to the lake, or lagoon, a quarter mile from the *Arthane*, for our morning dip—a luxury encouraged by our superman master since it had a rapidly recuperative effect. Bjornsen had not accompanied us that morning, and we were enjoying our brief freedom in a heart-to-heart discussion of our dilemma.

Lacking bathing suits, or material to make any, we were wearing our specially designed chamois underwear, our outer clothes lying in three neat piles at the edge of the polyp forest behind us. Not until we were ready to dress did we discover that our clothes had vanished.

"Bjornsen!" Marmouth cried as we rushed to the spot, finding not so much as a pair of socks left us by the thief.

Barbara and I said nothing as we peered suspiciously into the shadowy aisles of the coral labyrinth, not doubting that thence our precious apparel had vanished, and not at the *hands* of the sky-horses to be sure

Upon examining the soft soil we found the faint impressions of broad feet—Mad Bjornsen's trail as it appeared on Aldane World where he weighed considerably less than his Earth weight.

"This may be his idea of a good joke," I said.

"Don't worry, he isn't that crude," declared Barbara. "We might have expected this. Don't you remember? He believes clothing unnecessary for variable temperatures and to protect the skin from injury."

"And here we have perennial summer and such light gravity that we could fall off a house without barking a shin," added Marmouth, tartly.

Under less sinister circumstances the situation would have been amusing. As it was, we felt that the confiscation of our clothes only signified more radical innovations, and I suggested that we return to the space ship in the hope that our space suits would be found in the control room as we had left them.

I could sense Marmouth's suppressed rage as we set out for the *Arthane*. The incensed young Englishman was several leaps ahead when we at last panted up to the mold-covered space ship, finding, as we had feared, that the space suits also had been taken.

"His best stroke yet," grated Marmouth. "With the suits he has taken the cases of food. We must look to him for rations. But not long—" the implication was plain.

"Be careful," I exhorted. "It's not a question of courage, but of being certain. He might kill you and me, but Barbara—"

● Mad Bjornsen's thunderous voice interrupted us. He had appeared suddenly from some nearby hiding place, and at his orders we climbed morosely out of the control room.

We found him clad only in his chamois undergarment, exactly like ours. He was a figure that would have been godlike were it not for the merciless spirit lurking within.

"My material could have been worse," he commented, looking us over.

"Would you mind informing us the meaning of this outrage?" demanded Marmouth, belligerently.

"Not at all," rasped Bjornsen. "You are in good enough condition to begin training. Your clothing was needless interference and so I destroyed it by the quickest and easiest means at my disposal. As your remaining apparel wears out you will become accustomed to living in the nude, and I trust sufficiently deified so that it will mean nothing to you from the moral standpoint."

Talking like an automaton, he outlined his plans for us and the superman realm he was to organize. We were that day to begin a system of physical and mental exercises calculated to increase our vigor one hundred per cent under the gravitational conditions and with the diet and rest periods he prescribed. We would alternate the physical work with sessions of emotional adjustments. Holding that imperfectly controlled emotions were the chief weakness of Earthman, he intended to destroy all emotions and sentiment in us.

"When I am finished," he concluded, "if you are still alive, you will retain only intellectual reactions. In short, you shall be as near to gods as it is possible to make you after your pre-adjustment to Earth standards."

"You are mad!" exclaimed Barbara.

"But there is method in my madness to quote Hamlet," he rejoined, unmoved. "Besides, the state of my sanity doesn't alter the circumstances. Here the individual shall reign, and his only law shall be his impulses. Incidentally, my impulses will govern yours until you are able to direct yourselves according to the new standards."

"And if your impulses destroy us where will you be?" I put in, desperately.

"Then I will marry the queen of the sky-horses!"

"What?"

"My night adventures haven't been wasted," he said in a low, sinister tone. "Beings undreamed of sleep beneath the surface of this world. And you had best not attempt entering the catacombs in my absence."

"You are bluffing," Marmouth growled.

Bjornsen said no more as his manner changed from cold indifference to grim resolution.

"Follow me!" he roared at us, leaping to the top of the wrecked ship, his great muscles tensed, eyes dominating and challenging.

Silently we obeyed. A cross-country run ensued which brought us back to the *Arthane* utterly exhausted. We were permitted to rest and bathe, then food tablets were doled out from the confiscated stores, and again we were lined up before the ship. This time we were commanded to curse our tutor to the top of our voices, and to continue the maledictions until our throats were too hoarse to croak.

Resolved to be amazed at nothing, we complied. While Bjornsen laughed at us, threw stones at us, we pronounced epithets until our vocabularies were exhausted in that field.

"You may rest," he ended the orgy at his own caprice. "You are now in the first stage of greatness, which, according to Nietzsche, is the lion roaring in the wilderness. Soon you will become the burden-bearing camel, and last of all, if you survive, will come the humility of an infant and success."

It was then that Clyde Marmouth threw a stone with all his remaining strength. Bjornsen caught it and

threw it back with such force that it smashed against the wall of the ship, stunging us with flying fragments. As I cried out for Marmouth to contain himself, Bjornsen lunged among us, kicking, striking. The last I knew was that I attempted to kick him with one bare foot and received a stunning hurt on both head and foot.

We were in the control room, stretched out like corpses when Marmouth revived me later.

"I couldn't stand it any longer," he groaned, through puffed lips.

"But we've got to," I replied, groggily, holding my aching head. "He won't kill us. He'll do worse."

"Tonight," hissed Marmouth. "I'll find where he sleeps, so help me. I'll—"

"You'll do nothing of the sort," I rebuked. "Bjornrsen was right when he once said you were the biggest fool in the crew."

"Coward," he snarled at me, and strangely, I did not feel at all insulted as I crawled to Barbara's side to find her dully awake.

"Our only chance is to escape before it's too late," she moaned.

"But we must have food. There's no use taking foolish chances so long as we have hopes of the relief ship reaching us. They may be able to take care of Bjornsen."

Hours afterward, in the purple darkness, I awakened in great pain. Barbara was asleep near by, but I could not find Marmouth. Recalling his oath of speedy vengeance, I did not doubt that the doughty Englishman was somewhere in the wilds of the planetoid looking for Mad Bjornsen, like Don Quixote on a mission of demented chivalry.

Awakening as a result of my movements, Barbara waited with me for Marmouth's return. It was a watch destined never to end with its object attained. The spirited Englishman met his death that night somewhere in the maze of caverns where the sky-horses hid at night, and where Mad Bjornsen slept secure from the wrath of his human playthings.

CHAPTER VI

Pegasus to the Rescue

● Mad Bjornsen never mentioned the disappearance of Marmouth, but somehow we believed that he had had plenty to do with it, for he always evaded any direct inquiries. Meanwhile the strenuous training went on, Barbara Weyden and I the only understudies of the self-styled superman.

By the time the *Arthane* began to cave in from the inroads of 85, we had become virtually tireless and so rugged physically that we could catch a limestone boulder on the abdomen and bounce it back to the one who had hurled it. The light gravitation was of course responsible for our remarkable feats of strength and agility, though we could not have reached such extremities without intensive training.

Our feet became as calloused as if we had gone barefooted all our lives. Lungs expanded with amazing rapidity owing to incessant deep breathing, which was involuntary even in sleep because of the rare atmosphere. When we were forced to move out of the crumbling ruins of the rocket ship lest it fall in on as at night, our only remaining belongings were the tattered chamois underwear. All mechanical apparatus had been completely ruined, not even a heat cartridge left to cheer us during the endless purple nights that came between the seeming eternities of the hectic days. Only a huge ground- sign, made of bits of coral imbedded in the limestone, remained to testify that any such engine as the *Arthane* ever had visited the planetoid. This sign was also the marker of our fellows' graves, and read *Here They Lie,* though we hardly expected that the eyes of Earthmen would lay eyes on it with the exception of ourselves.

On the eastern shore of Consolation Bay, as we had come to call the lake nearest us, we made our new base of operations under the supervision of Serge the First. Our only need for dwellings in that mild climate was for protection against the nightly depredations of the sky-horses. To prevent them attacking while we slept, we erected thick-walled huts of limestone, that looked like brick kilns. Against these miniature fortresses the strange inhabitants of the planetoid would sometimes drum their great wings with a noise like thunder. But that was before we made friends with them, and they discovered with their mysterious intelligence that we, too, were victims of the man-master from a distant world.

As the days passed, days of torment and strain both physical and mental, I became more and more possessed with a terrifying suspicion, namely, that Mad Bjornsen intended driving me to suicide, after which he would become the Adam of his super-race and Barbara Weyden his Eve. I had no actual evidence of this, yet I could not otherwise explain the tedious routine of training he subjected us to. He would make of Barbara an Amazon of strength, an emotionless robot of life, using me as a pawn, to be destroyed as soon as I had served my purpose of encouraging her over the critical period of transition.

Knowing that he might kill me upon the slightest provocation, now that I was becoming less and less necessary to his plans, I was resolved upon the utmost caution, assuming docility and indifference, while in reality awaiting an advantageous situation. The idea of taking a human life no longer appalled me. In that respect I had become a graduate of Mad Bjornsen's curriculum.

A month dragged by, two months almost by Earth reckoning. It seemed an age. Earth and its gentler civilization became misty dreams whose reality faded with the disintegration of the *Arthane* beside the graves of those who seemed more fortunate than we. We clung precariously to sanity and hope, living like deified troglodytes in our boulder-walled huts by the shores of Consolation Bay.

But only our iron-hard muscles were consoled by the seething waters of the planetoid. Our rage hung to us like specters of the human beings we once had been, and as Mad Bjornsen said, it did not take us long to reach the stage of the camel in the evolution of true Nietszchean greatness. Indeed, we did bear our burdens uncomplainingly, but what Mad Bjornsen did not consider in his hellish schemes was that we were in love. Love burned on in our hearts, one "weakness" too deeply seated for our Lucifer to eradicate with his merciless program of physical violence and spiritual mayhem.

Barbara decorated the inside of her private citadel with bits of coral and fossilized shells until it resembled a miniature museum. To me that bric-a-brac was a pitiful

reminder of how she mourned the passing of more peaceful days, of how determinedly she adhered to the ideals of her previous life.

Her hut was sanctuary for me. With beard trimmed meticulously on the edge of a sharp stone, I would enter her house with exaggerated formality and courtesy, kissing her hand with a gallantry that would have won me a cuff and an imprecation if Mad Bjornsen had seen it.

I became more and more milady's knight-errant in spite of Bjornsen's mechanizing, brutalizing processes. Alone with Barbara, in dark or light, we whispered endearments and sympathies with voices harsh from the hours of roaring that were demanded of us in the "emotional adjustments"—those maddening periods of the day when the repetition of feelingless epigrams, or phrases, drove and drove into the subconscious toward one end: "Be hard! Be hard!"

Slowly but surely we learned the principles of the sky-horses' telegraphy. At first we succeeded only in conveying to them that we meant them no harm; but after that we progressed by leaps and bounds since contacts were much easier obtained and longer protracted. Soon the spectral, yet beautiful sky-horses, or air-lions, as we sometimes called them, were gathering about us nightly, answering our awkward rat-a-tat-tat, made by striking stones together, with repeated signals that were in most instances uninterpretable.

● There was one large Aldanian in particular who seemed to understand our plight better than the others. He seemed a sort of nabob, or patriarch, among his kind. He reminded me of an angel sometimes, but more often, because of his size, he looked like a flying horse of mythology. His huge wings, transparent and rainbow-hued, were nearly forty feet from tip to tip. When he oscillated his antennae near one's ear the sound was like the drumming of a hundred woodpeckers. It was chiefly through the intelligence of this giant sky-horse that we were able to piece together a crude code alphabet, and master the simpler expressions used by the strange denizens of the new world.

"Let's call him Pegasus," suggested Barbara, and Pegasus we called him ever afterward.

We could have advanced much more rapidly in our understanding of Pegasus and his spectral "herd" if there had been any light at night. Especially we might have been able to discover an indigent food before we did. As it was, Mad Bjornsen kept us from doing much investigating during the day, and the sky-horses were unable to understand what we meant by food, there being nothing similar in their vocabulary that we were able to discover. Air was their substitute for food, and many a time Barbara and I wished we were able to live on that ethereal substance, which is proverbially associated with poor newlyweds.

It was Pegasus who told us about the catacombs, or caves, that led down into the bowels of the planetoid from the holes in the surface. In these phosphorous-lighted grottos the sky-horses made their homes by day, near the mysterious "queens." And in one of these innumerable chambers Mad Bjornsen passed the long nights safe from the avenging clutches of his super-slaves.

The culmination of our plans to escape from the oppressions of our mad captain came as a result of his sudden and at first mysterious absence. Six months after our marooning on Aldane World, Serge the First made the greatest mistake in his career as a world conquistador when he dissected one of the sky-horses in search of biological data.

Pegasus informed us of the outrage, as the "crime" appeared to be in the intelligences of the sky-horses. It transpired that by the unknown sense, or senses, that the Aldanians seemed to possess, they were almost simultaneously apprised of the offense. Exactly when, or how, it happened we never learned, but there was no question as to the indignation of the sky-horses. When Pegasus flew up alone through the purple glow of twilight we could not misinterpret his angry buzzing.

No other sky-horses were in sight or hearing at the time, having concentrated underground, according to our giant friend's reports. Once we heard the cyclonic sound made by a large number flying south across the bay, but they did not come near us, and their passage was further proof that Mad Bjornsen was not in the vicinity.

By midnight we were certain that Serge the First had his hands full of trouble, and when Barbara went to her hut for a nap, we had strong hopes that fortune was at last smiling on us. Yet, as I sat up alone on the first watch, I could not escape the contradictions of the situation. If Mad Bjornsen were killed by the Aldanians, we would be left without food, since the secret of the place where he kept the tablets would die with him. Only the unpleasant alternative of eating the sky-horses would remain, unless, by some unexpected miracle, we stumbled upon some form of vegetable or animal life underground.

But Barbara's cheerfulness encouraged me when she relieved me a few hours before dawn. I took to my couch of dust resolved that even starvation was preferable to prolonged subjugation to the will of Mad Bjornsen.

The mauve light of sunrise on the plantoid awakened me. Barbara still was on watch, and we exchanged good cheer at the continued absence of Mad Bjornsen, who invariably routed us out at that hour. After a plunge in the bay and a breakfast of phosphoric water, we returned to the huts to lay our plans for the future.

By noon there no longer was any doubt in our minds that something serious had happened to our oppressor. Our chances to escape had surely come, and it did not behoove us to be squeamish concerning the only available food.

"If this had happened three months ago I wouldn't have been satisfied until I had tracked him down and made sure he was dead," I told Barbara while we scanned the enchanted landscape from a knoll above the huts. "Now I've got to admit that he's made life livable on Aldane World. Without the endurance he forced on me in training I'd be a poor excuse of an interplanetarian."

"I agree with you, Monte," rejoined Barbara, "but we couldn't wish him worse than he seems to have brought on himself. Anyway we've got to get away, and far away before he is able to look for us. If we get too hungry there's always the sky-horses, though the mere idea of eating one makes me feel like a cannibal."

"And a dyspeptic," I added.

"The catacombs remain to be explored for food though," Barbara went on, optimistically. "And we can depend on Pegasus to show us around underground. You know I have a notion that Bjornsen knew of some kind

of food down there, which he didn't tell us about for fear we'd run away from him and his precious food cases."

All the rest of the afternoon we chafed in idleness, waiting for the falling of darkness and the coming of our giant sky-horse friend, who had left us at dawn as usual. Never was a ten-hour afternoon as long as that. With every slightest sound we stared nervously, fearing to see the herculean figure of Mad Bjornsen soaring into view with the tremendous bounds by which he traveled on Aldane World, coming to wreck our fine plans of escape.

Night came at last, and with it Pegasus, voluble with news of our oppressor, which we were unable to understand for the most part. Pegasus was more than willing to carry us as far as we wished to go, and when we made clear our plans, he was impatient to be off. Delaying no longer, we crawled between the mighty wings of the interplanetarian, and were borne up and away from the scene of our bondage, into the unknown darkness of the planetoid.

● Flying steadily westward, we covered a distance of many miles before the sunrise painted the alien sky with crimson and violet. Pegasus needed no urging to seek the caverns, where we intended hiding until darkness came again, meanwhile searching for something edible, which was more attractive than sky-horse steak and phosphoric water.

Soon we were lost in darkness under the massive foundations of the polyp forests. With imaginations conjuring visions of the dread sky-horse "queens," it was not a pleasureable adventure, and it proved conclusively that Mad Bjornsen had not succeeded in immunizing us to fear sensations. Only the reassuring *tr-r-rt, tr-r-rt*, of our strange guide and steed allayed our forebodings as we were led deeper and deeper into the substratum of the new world.

At length the damp walls began to glow with spots and streaks of phosphorous, indicating water not far ahead. We entered a large, oblong chamber, that literally flamed with lurid luminescence. Here Pegasus lurched to a stop, and we slid to the ground.

"Aladdin's cave," Barbara said awed, as we began examining the walls of the subterranean room. With every stone alive with phosphorous, one had the impression of exploring the inside of an enormous furnace.

"Better than playing superman for Mad Bjornsen," Barbara cheered me.

"I don't know," I replied, dubiously. "I almost wish I were back at the bay when I think of the food tablets. This is the first time my mouth has actually watered for such medicinal powder."

"And I'm working up an appetite for something far worse than food tablets," laughed Barbara. "I could almost devour a large slice of our friend Pegasus."

Purely in fun, she seized the edge of one monstrous wing and made as if to bite out a piece. No sooner had she neared the tissue with her teeth than Pegasus gave a tremendous start, flapping his wings as if to blow us down. Barbara staggered back to my side, and together we stared at the apparently enraged Aldanian.

A loud rat-tat-tat of antennae followed Pegasus' exhibition of displeasure. What he conveyed was electrifying. We had at last succeeded in communicating him our need for food!

"Motion," Pegasus telegraphed a moment later, and scarcely daring to hope that the faithful creature completely comprehended our need, we followed him to the passage by which we had entered the subterranean chamber.

Like some monstrous, deified seal, the great sky-horse floundered up the gentle grade to a point where the walls began to dry off somewhat and show only sparse splotches of luminous moisture. Just at the deeper darkness of the upper galleries, he stopped and emitted a sharp *tr-t-t, tr-t-t* meaning "look here."

Eagerly we dropped to hands and knees. We did not need to look far. At the foot of the wall we found the first traces—nodules of an excrescence resembling certain kinds of mold on Earth.

"Food!" I cried out the importunate word, filling my hands with the stuff.

Barbara already had tasted it, and her exclamation of astonishment was not unmingled with pleasure.

The "manna" of Aldane World tasted somewhat like wild honey, though there was a less pleasing tang of phosphorous. But what was more important than flavor, the deposit seemed rich in protein and vitamines.

We had not hoped to find such a satisfactory substitute for the scientific food tablets, and it was a team of doubting Thomases that looked further for signs of the deposits. The stuff grew in patches here and there, extending over a section of the passage more than thirty paces long, easy to find once we had been led to it.

Pegasus had gone back to the brightly-lighted chamber during our celebration of the discovery of natural food on Aldane World. With our hands full of the Godsend we followed. Half an hour later, having experienced no ill-effects from the small portions we had eaten, we ate our fill of the strange provender, wishing we had sufficient vocabulary to thank Pegasus for his favor.

"What shall we name it?" Barbara wanted to know.

I suggested "fairy foam" and several other fanciful terms, but Barbara was a realist.

"Why not glow wax?" she suggested. "It has the consistency of wax and it shines in the dark."

Being ultra-modern, we believed in short cuts in terminology, and glow wax quickly became glox, by which name this curious and invaluable food still is known on Terra Firma.

Taking turns on watch for the possible appearance of Mad Bjornsen, we passed the rest of the period of daylight underground, and were called to attention by Pegasus at the fall of evening, which he could sense as if by a photoelectric, radioactive intelligence.

Once more on the surface, we filled our lungs with the bracing air of the red world, and, shrouded by the purple darkness from any danger of Bjornsen sighting us, we climbed aboard our living monoplane.

CHAPTER VII

Waterloo!

● We must have been more than three hundred miles from Consolation Bay before we began to look for a place to settle down. The terrain had not changed. The glowing pools, or lagoons, were as numerous as ever. Once we had decided that it was safe to be abroad by

day and to leave our footprints on the surface, we spent many hours in the water, swimming, diving and splashing, like children on a vacation. Especially did the water splashing amuse us since the showers of drops fell so slowly. With little effort we could create the most beautiful fountains.

A week after our departure from Consolation Bay we were nearly five hundred miles from Mad Bjornsen's stamping grounds, by our estimation of distance. We were beginning to forget that there ever had been a threat of superman vengeance hanging over us. Such a sense of freedom and well being I had never thought possible to experience among the petrified horrors of Aldane World, and I was satisfied that love was at the bottom of it all.

Then we reached the Promised Land, as we promptly named it. We had been absent from Consolation Bay almost a month by Earth reckoning. Pegasus had remained with us even while we traveled on foot. He had just come out of his diurnal hiding when at twilight we broke out of a coral thicket more than thirty feet high and saw the glimmering expanse of a large lake before us. We had been wandering in that vicinity for hours without seeing the lake, so restricted was our perspective on the planetoid, due to atmosphere and surface contours.

"Here is where we pitch our stony tents," I sang out jubilantly, and Barbara was in enthusiastic agreement.

At evening the scene was one of striking beauty, with the varicolored polyps growing down to the mirror edge of the phosphorescent water, which glowed like burnished gold the moment the daylight began to dim. We gazed in enchantment upon the fantastical colors until it was too dark to see.

But we did not fully appreciate the Promised Land until next morning when we emerged from the mouth of a cavern on the north side of the lake. Treasure Lake, which we had decided upon as a name the evening before, was nearly a mile wide, and under the wine-hued morning sun it sparkled like an ocean of rubies.

Barbara raced me down the shell-lodged beach over which no human foot had trod before us, and into the mirror-like water we plunged, swimming halfway around the wild shorelines before we returned to the beach to consider a site for our dwellings.

I pass over the days that followed. Those who have engaged in the first months of courtship may understand the ecstatic happiness of two who have only themselves and love. Days became weeks and weeks months, while our feeling of security, that we had eluded Mad Bjornsen for good, or else that he had been killed by the sky-horses, became almost a certainty.

But our time was not wholly spent in courtship and play. There were serious intervals and intellectual intervals. For instance, when we discussed the possibilities of Herbert Aldane reaching us with the relief ship. We were agreed that the relief crew would circumnavigate the planetoid in search of a ground-sign, and that we would be able to hear the rocket tubes for a distance of several hundred miles in such light, windless atmosphere.

We built a ground-sign, hoping Mad Bjornsen would not be the first to see it. It was an enormous project. Six hundred yards long by two hundred wide it lay on the lime-white beach, printed in sidewalks of red coral; the word "here" in capital letters, which we illuminated with phosphorous for night visibility. Yet, conspicuous as it must have been from the air, we knew that the relief crew might not see it at the speed and altitude at which they would be flying as they plunged out of the void.

"It's nearly a year now since Herbert Aldane notified us that the relief ship was underway," I reminded Barbara. "He ought to be afloat by this time. I wonder if we can keep our sanity when we hear the thunder of the tubes."

"Yes—when we hear them," she responded with less enthusiasm and more honesty. "We have moved several million miles in orbit. Besides they will need far more fuel than we had, unless a magnetic vortex happens to pick them up."

"I know," I admitted lamely. "There's no use deceiving ourselves with optimism. And you haven't said the half of it. They may be drawn into another body than Aldane World."

"If something doesn't happen in the meteoric shpere," she summarized, and we both had a good laugh at our thorough pessimism, while at the same time we knew that Herbert Aldane would move heaven and earth to reach us.

Meanwhile, neither Barbara nor I were greatly depressed by the circumstances. Free of Mad Bjornsen's impositions even the idea of lifelong solitude did not dismay us.

But there came an interruption to our Arcadian bliss.

That morning we had swum to the southern shore of Treasure Lake for a stroll in the polyp forest that crowded the water there. Danger never was farther from our minds than when we sat down for a tête-a-tête in an arbor-like nook which we frequently visited.

Barbara was saying: "But if the unknown sense of the sky-horse is tension, then radioactivity would—"

At that instant we heard a slight movement on the mound behind us, and a dim shadow dropped down across our vision, looming like the wings of Satan. We did not turn at first. Barbara's face was drained of blood, while I sat riveted to the stone in such fear that my legs were numb.

"O-ho!" called an unforgettable voice, mocking and derisive. "Babes in the woods without a guardian angel—or a preacher."

● Then we leaped to our feet and turned to see him standing above us, looking down with a look of triumph on his face. He, too, had made a loin cloth of his vanishing chamois underwear, and if semi-nudity had improved our appearance, it had almost deified his.

"Ah, you need more training," he called down. "You are exhibiting fear."

"Well, what are you going to do?" I found voice.

"Permit your imaginations to torment you for a few seconds," he laughed.

"Please tell us how you found us," Barbara interpolated, the flatness of her voice expressing her resignation.

He spread his powerful hands in a gesture of disparagement. "Very simple," he explained, obligingly. "You couldn't have gone north or south because of the cold zones. You wouldn't have gone east because of the graves to pass. Psychology, see? So I started west, and by listening to the code conversations of the Aldanians, I heard about you and your champion, Pegasus. After that it was a mere matter of legs and eyes.

He was gazing at Barbara now with that estimative

probing which fell short of insolence by some indeterminable quality of his personality.

"Good morning, good morning, Miss Solemnity," he chafed her. "Why the so animadversive mien?"

"It is inconsistent of you to wish me good morning," she replied, tartly.

He jumped down from the boulders and sat down insolently on the natural bench we had quitted. He seemed remotely preoccupied about something and was running his fingers across his chin and through his beard. I noticed a slight strain in the muscles around the eyes, which I laid to fatigue at the time.

"Sit down," he finally directed us, with a wave of one hand. "I have bad news for you. The sky-horses have done for me."

Barbara and I exchanged glances, while Bjornsen laughed at our perplexity.

"Wondering how that could be bad news, eh? Well, the truth is I've been poisoned by some means I can't understand. I got it from one of the queens. I may be wrong, but I think I'm going to die pretty soon, in fact, almost any time. The attacks are something like epilepsy. I didn't come out of the last one for several hours." He seemed to be talking to himself as much as to us—a kind of detached reverie. "You know these creatures are more like bees than horses," he went on. "They have queens that give birth to all the young. The queens are self-fertilizing and live on air like the sky-horses. The first time I saw one in a lower gallery of the caverns I thought it was a gigantic amoeba. Well, I found out different. Each of these queens is the head of a clan, or drove, of sky-horses. When something happens to a sky-horse the queen knows by some radioactive sense that we do not possess. That is why I'm here now on my last legs. You see I cut up a colt to see what made it tick."

His low laugh made me shudder as after a moment of silence he continued: "Of course my ambitions on Aldane World have been decidedly curtailed. In fact, the Napoleon of interplanetary space has met his Waterloo. But, unfortunately, this still is bad news for you. You see I have ambition in another field." He laughed again, and this time at us. We were listening to him as a judge pronouncing sentence of death.

"Just what do you think I would do in this situation?" he surprised us by asking. "My visions of an ideal society on a new world are destroyed. The skinny finger of Death is plucking at my shoulder. I have maybe three months to live, maybe an hour."

"I should say you ought to mend your ways and get something like real happiness out of being reasonably kind to your inferiors," I said.

He considered a moment; I thought he might be waiting for Barbara to speak, but she did not. Presently he said: "Yes, that is exactly what I could expect from you. Already you assert what you hope is a stronger impulse. It's really too bad that I still have impulses and dare to think them stronger than yours."

We waited for him to go on, and presently he did so, introspectively, while his eyes took on an expression of bewilderment, as if he could not credit the menace of his unconquerable strength.

"It is the sky-horse queens that have exterminated every other form of life on Aldane World," he said. "I underestimated their powers. They could conquer the universe with their strange senses. But I should be proud to die at the hands of a life-form superior to Earthman."

He seemed to lose consciousness of our presence for a moment, and when he recovered from the lapse, which I associated with his illness, he went on:

"When I knew my dream of conquest was destroyed, I considered what small ambition might yet be realized. Naturally I turned to something still in my power—Earthman, Earthwoman, and my wish the law on Aldane World." His next utterance came as an exploding bombshell, even though we must subconsciously have been anticipating such. "Now I intend to realize a repressed desire. Since my higher ideals cannot be materialized, I turn to the lower and primal. In these last months of life I assert the primal privilege of the superior male."

● His voice died away like a death-knell in the windless stillness of the polyp forest. We could say nothing. All of our previous fears were substantiated by this revelation of the beast that slumbered behind the intellectual front of Mad Bjornsen. And I knew then the acid bitterness of incapability, the sickening realization of my inferiority in every way to this monstrosity of man.

Amused by our horror, he looked at us, unmoved, dispassionate, experimenting to the last with the souls in his power.

But Barbara could control her disgust and indignation no longer.

"You have at last become a fool, Serge Bjornsen!" she burst out, and I think she regretted immediately that she had lost her head.

Mad Bjornsen got quietly to his feet. There was a saturnine smile on his bearded lips.

"You are going to have an opportunity to prove that statement, young lady," he said, then turned toward the lake, motioning us to follow. Just before we reached the water, he turned back and called to me:

"A race with death, Harbin, and the goal a woman's love. Great stuff to die on, eh? Even better than walking on new worlds for the first time."

We had plenty of time to recover our senses during the long swim back to the beach. I had a rather groundless fear that Barbara might attempt to drown herself in her horror of what Bjornsen had suggested, and I stayed close by, while our captor plowed off ahead, occasionally turning over to his back, as if to see that we did not strike out on another course in an attempt to escape. Barbara seemed too stunned to speak at first, but the water revived her, and presently she called out to me in a low voice:

"He'll try to hypnotize me. He used to amuse himself with hypnotism at Aldane Hangars."

"He'll not try it if I can kill him first," I vowed.

"The attacks he speaks of—" she called back "—if he only has one! We could get away before he recovered."

"Or finish him while we had the chance," I amended. "Careful! He's dropping back to listen."

We swam on in silence. As we overhauled him, Mad Bjornsen shouted over the water: "Keep ahead of me and get out of the water first. None of your tricks, or I'll drown both of you!"

Obediently we speeded up, and as Mad Bjornsen dropped behind, we laid our plans. The ground-sign was not far from the edge of the water, and the huge segments of coral composing it would furnish deadly

missiles. Before he could get out of the water we resolved to bombard him with the heavy pieces of coral, knowing well that once he gained firm footing we would stand little chance of overcoming him.

At first it seemed that our plans would work out as intended. Assuming a dejected and submissive attitude, we splashed out of the water some distance ahead of Bjornsen, starting for the ground-sign. But something inadvertent in our actions must have aroused his suspicions. We heard a thunderous shout and whirled back. Bjornsen was lunging toward us over the water like a giant dolphin. One look at that fierce visage was enough to send us dashing madly for the ground-sign and the coral.

But there proved no need for hostilities. When we looked back at our aggressor, he was struggling frantically and futilely just beyond wading depth, as if something had caught him from under water.

"He's had an attack!" cried Barbara.

His struggles grew rapidly weaker as we watched awe-stricken. At last he went down, and when he came up again his face was set in a ghastly deathmask. As Barbara had divined, he had apparently had been taken with one of the fits.

I know of no other person whom we would not have tried to rescue under the circumstances. It was the only death-bed we ever were to attend with exultation. Not until he had gone down the last time did we enter the water; and then only after a long wait for his reappear-

After several minutes of diving we brought up the body and towed it ashore. Even then we might have resuscitated one in whom the life-flame burned so intensely, but instead we made certain that all life was extinct.

"I can't believe we are free," said Barbara, huskily, as we bent over the cold flesh that once had been the mightiest engine of human life which Earth could produce.

"Nor I," I solemnly agreed. "He has met his match at last, but it had to be something more than human."

Had we been forced to live the rest of our lives on Aldane World, it is probable that we would have seen one of the amebic masses which Mad Bjornsen had described as the queens of the Aldanians. However, it is more likely that they would have destroyed us in some miraculous manner, as they had destroyed every other form of life on the planetoid except their own progeny.

But destiny had not decreed that the last of the *Arthane's* martyrs should become the Adam and Eve of a new world. Not quite four months after the burial of Mad Bjornsen on the beach of Treasure Lake there came a sign in the red heavens of our tiny world that was to us like the Eastern Star to the Wise Men.

We had just come in from a long swim in Treasure Lake and were sitting in the eerie-glow of the phoshorous-coated ground-sign.

Off in the southwest we heard it first—a low, mournful whining that rose swiftly to a shriek like that of an artillery projectile. Before we could arouse from stupefying amazements, a blast of thunder had crashed through the thin atmosphere, a blue wedge of gaseous flame flashing across the southern firmament, vanished like a meteor, or falling star.

"They are circumnavigating us," I managed to articulate. "They'll cruise the daylight hemisphere looking for signals of distress. Then they'll return to the night side and see our ground-sign, if they haven't seen it already."

Then a watch began which neither of us ever want to repeat. The idea that we must wait helplessly while the relief ship traversed the daylight side of the planetoid was agonizing. Three hours wore away. Midnight came. And at last we heard the returning thunder of the rocket tubes. Holding our breaths in fear that they would miss us again, we saw that the crew was dropping flares that lighted the polyp forest for miles around.

The thunder grew louder as the ship flew to a point that seemed almost directly over us. Another flare burst in the southwest, and then the rocket exhausts pointed straight down as the landing batteries went into action. They had seen the ground-sign!

Stumbling and sliding between long, aerial leaps, we headed for the flare near which the rocket ship had disappeared over the curve of the planetoid's surface. Minutes later—minutes that seemed hours—we sighted the nucleus of the earth-light blazing not far ahead. Several strange figures were looking toward us intently from a mound within the circle of light. They were Earthmen in space-suits.

I became vaguely conscious of the general wildness of our appearance as I caught the threatening glint of a pistol barrel. I raised my hand in the savage sign of peace, too stunned by rejoicing to speak.

A hand was raised in response, and a human voice rasped through an amplifying audio-valve transmitter:

"In the name of God who are you?"

"Earthians, I swear," I called back.

A cheer broke from the ranks of the rescuing party as they leaped toward us. We were surrounded by babbling voices and curious glass eyes.

"You've got to project again," I managed to gasp out. "This atmosphere will ruin the ship."

Barbara had been sounding a similar warning to the rest of the crew, and in a moment we were hurrying toward the edge of the light.

The relief ship loomed up before us in a deep draw, like a gigantic submarine on sea bottom. Many hands crowded us into an airlock. Some one led us along a dimly lighted service channel. An air-tight door opened; we stumbled into a passenger compartment.

"Keep the door shut," our guide shouted before he departed. "You won't need space suits. Clothes in the lockers."

Somehow we got into a pair of flying suits before the voice of Herbert Aldane sounded in the speaking tubes:

"Stand by for projection! All hands in the shock frames."

With the thunder of acceleration salvos informing us that we were at last departing from the scene of our long exile, we recovered a measure of composure. Together we stared into the reflectors of the observation periscopes.

Far below we could see the glimmering lakes and bays in their setting of purple gloom. I thought I noticed a larger blot of yellow that looked like Treasure Lake, and a wave of sadness, almost homesickness, came over me, as Barbara buried her eyes in my shoulder.

THE END

(Illustration by Paul)

With a long, flying leap the strange entity sprang in air. I caught the flexible three-fingered hand and drew him to safety.

FLIGHT INTO SUPER-TIME

BY CLARK ASHTON SMITH

● Clark Ashton Smith refuses to be limited in his imagination by time and space. He wishes to create a world in which both time and space are at our control; and by scientific power we can be where and when we wish. Naturally, in this story, we must take his time-machine for granted. We must allow him one assumption. "Assume that such a machine were possible, then what would happen?"

The "happenings" in this story may appear bizarre, incredible, fantastic. But the universe is so vast, and our knowledge of it is so insignificant, that we must hesitate to pronounce any of his pictures as impossible. We must take them, as they are given, as the creations of a really imaginative mind that longs for infinity.

● Some who read this narrative will no doubt remember the disappearance of the eccentric millionaire Domitian Malgraff and his Chinese servant Li Wong, which provided the newspapers of 1940 with flamboyant headlines and many columns of rumor and speculation.

Reams were written concerning the case; but, stripped of all reportorial embellishments, it can hardly have been said to constitute a story. There were no verifiable motives nor explanatory circumstances, no clues nor traces of any kind. The two men had passed from all mundane knowledge, between one hour and the next, as if they had evaporated like some of the queer volatile chemicals with which Malgraff had been experimenting in his private laboratory. No one knew the use of these chemicals; and no one knew what had happened to Malgraff and Li Wong.

Few, perhaps, will consider that any reliable solution of these problems is now afforded through the publication of the manuscript received by Sylvia Talbot a year ago in the fall of 1941.

Miss Talbot had formerly been affianced to Malgraff, but had broken off the engagement three years prior to his disappearance. She had been fond of him; but his dreamy disposition and impractical leanings had formed a decided barrier from her viewpoint. The youth had seemed to take his dismissal lightly and had afterwards plunged into scientific researches whose nature and object he confided to no one. But neither then nor at any other time had he shown the least inclination to supplement by his own efforts the huge fortune inherited from his father.

Regarding his vanishment, Miss Talbot was as much in the dark as everyone else. After the breaking-off of the engagement she had continued to hear from him at intervals; but his letters had grown more and more infrequent through his absorption in unnamed studies and labors. She was both surprised and shocked by the news of his disappearance.

A world-wide search was made by his lawyers and relations; but without result. Then, in the late summer of 1941, the strange vessel containing the aforesaid manuscript was found floating in the Banda Sea, between Celebes and the Spice Islands, by a Dutch pearler.

The vessel was a sphere of some unknown crystalline substance, with flattened ends. It was eighteen inches in diameter and possessed an interior mechanism of miniature dynamos and induction coils, all of the same clear material, together with an apparatus resembling an hour-glass, which was half-filled with a grey powder. The outer surface was studded with several tiny knobs. In the very center, in a small cylindrical compartment, was a thick roll of greenish-yellow paper on which the name and address of Miss Sylvia Talbot were plainly legible through the various layers of the sphere. The writing had been done with some sort of brush or an extremely heavy pen, in pigment of a rare shade of purple.

Two months later, the thing reached Miss Talbot, who was startled and amazed when she recognized the writing as that of Domitian Malgraff.

After many vain experiments, by manipulating certain of the exterior knobs, the vessel was opened; and it came apart in two hemispheric sections. Miss Talbot found that the roll of paper contained a voluminous letter from Malgraff, written on yard-long sheets. This letter, with the omission of a few intimate paragraphs and sentences, is now offered to the public in obedience to the writer's wish.

Malgraff's incredible tale, of course, is easily enough to be explained on the ground of imaginative fabrication. Such, in the opinion of those who knew him, would be far from incompatible with his character. In his own whimsical and fantastic way, he is said to have been something of a joker. A new search has now been instituted, on the supposition that he may be living somewhere in the Orient; and all the isles adjacent to the Banda Sea will be carefully examined.

However, certain collateral details are somewhat mysterious and baffling. The material and mechanism of the sphere are unfamiliar to scientists, and are still unex-

plained; and the fabric on which the letter was written, as well as the pigment used, have so far defied analysis. The paper, in its chemical composition, seems to present affinities with both vellum and papyrus; and the pigment has no terrestrial analogue.

* * * *

THE LETTER

Dear Sylvia:

You have always considered me a hopeless dreamer; and I am the last person who would endeavor or even wish to dispute your summary. It might be added that I am one of those dreamers who have not been able to content themselves with dreams. Such persons, as a rule, are unfortunate and unhappy, since few of them are capable of realizing, or even approximating, their visionary conceptions.

In my case, the attempted realization has led to a singular result: I am writing this letter from a world that lies far-off in the two-fold labyrinth of time and space; a world removed by many million years from the one wherein you live, the one whereto I am native.

As you know, I have never cared greatly for the material things of earth. I have always been irked by the present age, have always been devoured by a sort of nostalgia for other times and places. It has seemed so oddly and capriciously arbitrary that I should be *here* and not *otherwhere*, in the infinite, eternal ranges of being; and I have long wondered if it would not be possible to gain control of the laws that determine our temporal or cosmic situation, and pass at will from world to world or from cycle to cycle.

It was after you dismissed me that my speculations along such lines began to take a practical turn. You had told me that my dreamings were no less impossible than useless. Perhaps, among other things, I desired to prove that they were not impossible. Their utility or inutility was not a problem that concerned me, nor one which any man could decide.

I shall not weary you with a full recountal of my labors and researches. I sought above all else to invent a machine by which I could travel in time, could penetrate the past or the future. I started from the theory that movement in the time-dimension could be controlled, accelerated or reversed by the action of some special force. By virtue of such regulation, one would be able to move forward or backward along the æons.

● I shall say only that I succeeded in isolating the theoretic time-force, though without learning its ultimate nature and origin. It is an all-pervading energy, with a shorter wavelength than that of the cosmic rays. Then I invented a compound metal, perfectly transparent and of great toughness, which was peculiarly fitted for use in conducting and concentrating the force.

From this metal I constructed my machine, with dynamos in which I could develop an almost illimitable power. The reversal of the force, compelling a retrograde movement in time, could be secured by passing the current through certain rare volatile chemicals imprisoned in a special device resembling a large hour-glass.

After many months of arduous effort, the mechanism stood completed on the floor of my Chicago laboratory. Its outward form was more or less spherical, with flattened ends like those of a Chinese orange. It was capable of being hermetically sealed, and the machinery included an oxygen-apparatus. Within, there was ample room for three people amid the great tubular dynamos, the array of chronometric dials, and the board of regulative levers and switches. All the parts, being made of the same material, were transparent as glass.

Though I have never loved machinery, I surveyed it with a certain pride. There was a delightful irony in the thought that by using this super-mechanical device I could escape from the machine-ridden era in which I had been born.

My first intention was to explore the future. By travelling far enough in forward time, I expected to find one of two things: men would either have learned to discard their cumbrous and complicated engines, or would have been destroyed by them, giving place to some other and more sensible species in the course of mundane evolution.

However, if the human future failed to inveigle me in any of its phases, I could reverse the working of the time-force and go back into the æons that were posterior to my own epoch. In these, unless history and fable had lied, the conditions of life would be more congenial to my own tastes. But my most urgent curiosity was concerning the unknown and problematic years of ages to come.

All my labors had been carried on in private, with no other aid than that of Li Wong, my Chinese cook, valet and housekeeper. And at first I did not confide the purpose of the mechanism even to Li Wong, though I knew him to be the most discreet and intelligent of mortals. People in general would have laughed if they had known what I was trying to do. Also there were cousins and other relations, all enviously watchful of my inherited wealth . . . and a country full of lawyers, alienists and lunatic asylums. I have always had a reputation for eccentricity; and I did not choose to give my dear relatives an opportunity which might have been considered legally sufficient for the well-known process of "railroading."

I had fully intended to take the time-voyage alone. But when I had finished building the machine, and all was in readiness for departure, I realized that it would be impossible to go without my factotum, Li Wong. Apart from his usefulness and trustworthiness, the little Chinaman was good company. He was something of a scholar in his own tongue, and did not belong to the coolie class. Though his mastery of English was still imperfect, and my knowledge of Chinese altogether rudimentary, we had often discussed the poetry and philosophy of his own land, as well as certain less erudite topics.

Li Wong received the announcement of our projected journey with the same blandness and aplomb which he would have shown if I had told him we were going into the next state.

"Me go pack," he said. "You want plentee shirt?"

Our preparations were soon made. Apart from the changes of raiment suggested by Li Wong, we took with us a ten days' supply of provisions, a medicine kit, and a bottle of brandy, all of which were stored in lockers I had built for the purpose. Not knowing what we might find, or what might happen by the way, it was well to be prepared for emergencies.

All was now ready. I locked Li Wong and myself within the time-sphere, and then sat down before the instrument-board on which the controlling levers were ranged. I felt the thrill of a new Columbus or a Magel-

lan, about to sail for undiscovered continents. Compared with this, all former human explorations would be as the crawling of emmets and pismires.

Even in the exultation of that moment, though everything had been calculated with mathematical precision, had been worked out to an algebraic degree, I recognized the element of uncertainty and danger. The effect of time-travelling on the human constitution was an unknown quantity. Neither of us might survive the process of acceleration in which lustrums and decades and centuries would be reduced to mere seconds.

I pointed this out to Li Wong. "Maybe you had better stay behind after all," I suggested.

He shook his head vigorously. "You go, I go," he said with an imperturbable smile.

Making a mental note of the hour, day and minute of our departure, I pulled a lever and turned on the accelerative force.

Clark Ashton Smith

● I had hardly known what to anticipate in the way of physical reactions and sensations. Among other contingencies, it had even occurred to me that I might become partially or wholly unconscious; and I had clamped myself to the seat to avoid falling in case of this.

However, the real effect was very strange and unforeseen. My first feeling was that of sudden bodily lightness and immateriality. At the same time, the machine seemed to have expanded, its walls, dynamos and other portions were a dim and shining blur, and appeared to repeat themselves in an endless succession of momentary images. My own person, and that of Li Wong, were multiplied in the same manner. I was indescribably conscious of myself as a mere flickering shadow, from which was projected a series of other shadows. I tried to speak, and the words became an indefinitely repeated echo.

For a brief interval the sphere seemed to be hanging in a sea of light. Then, incomprehensibly, it began to darken. A great blackness pressed upon it from without; but the outlines of everything within the sphere were still visible through a sort of luminosity that clung to them like a feeble phosphorescence.

I was puzzled by these phenomena and, in particular, by the outside darkness, for which I could not account. Theoretically, the days and night through which we were passing at such supreme velocity would merge in a sort of greyness.

Centuries, æons, *kalpas* of time, were going by in the strange night. Then, mysterious as the darkness, there came a sudden, blinding glare of light, intenser than anything I had yet known which pervaded the sphere, and died away like a lightning-flash. It was followed shortly by two lesser flashes, very close together; and then the outer gloom returned once more.

I reached out, with a hand that became a hundred hands, and succeeded somehow in turning on the light that hung above my instrument board and chronometric dials. One of these dials was designed to register my forward motion in time. It was hard to distinguish the real hands and figures in the ghostly blur by which they were surrounded; but somehow, after much poring, I found that I had gone onward into the future for no less than twenty thousand years!

Surely this would be enough, at least for the initial stage of my flight. I groped for the levers, and turned off the accelerative power.

Instantly my visual sensations became those of a normal three-dimensional being in normal time and space. But the feeling of lightness and immateriality still persisted. It seemed to me that I should have floated in midair like a feather, if it had not been for the metal clamps that held me to the seat.

I heard the voice of Li Wong, whom I had practically forgotten for the moment. The voice came from above! Startled, I saw that the Chinese, with his wide sleeves flapping ludicrously, had floated upward and was bobbing about in the air, trying vainly to recover his equilibrium and re-establish his feet on the floor!

"Me fly all same sea-gull," he tittered, seeming to be amused rather than frightened by his novel predicament.

What on earth had happened? Was the force of gravity non-existent in this future world? I peered out through the glassy walls, trying to determine the geographical features of the terrain in which we had landed.

It must be night, I thought, for all was darkness, shot with a million cold and piercing stars. But why were the stars all around us, as well as above? Even if we were on a mountain-top, we should be surrounded by the vague masses of remote nocturnal horizons.

But there were no horizons anywhere—only the swarming lights of irrecognizable constellations. With growing bewilderment, I looked down at the crystalline floor, and beneath me, as in some awful gulf, there swam the icy fires of unknown galaxies! I saw, with a terrific mental shock, that we were suspended in mid-space.

My first thought was that the earth and the solar system had been annihilated. Somewhile during the past twenty thousand years, there had been a cosmic cataclysm; and Li Wong and myself, moving at inconceivable speed in the abstract time-dimension, had somehow managed to escape it.

CHAPTER II

A Bizarre World

● Then, like a thunderclap, there came the realization of the truth. *The sphere had moved only in time;* but, in the interim, the earth and the sun had been travelling away from us in space, even as all stellar and planetary bodies are said to travel. I had never dreamt of such a contingency in all my calculations, thinking that the laws of gravitation would keep us automatically in the same position relative to the earth itself at which we had started. But evidently these laws were non-effective in the ultra-

spatial dimension known as time. We had stood still in regard to ordinary space, and were now separated from the earth by twenty thousand years of cosmic drift! Considered as a time-machine, my invention was a pretty fair vehicle for instellar transit.

To say that I was dumfounded would only prove the inadequacy of human words. The feeling that surged upon me was the most utter and abominable panic that I have ever experienced. The sensations of an explorer lost without a compass amid the eternal, unhorizoned ice of some Arctic desert would have been mild and infantile in comparison. Never before had I understood the true awfulness of inter-sidereal depth and distance, of the gulf wherein there is neither limitation nor direction. I seemed to whirl like a lost mote on the winds of immeasurable chaos, in a vertigo of the spirit as well as of the body.

I reached out for the lever that would reverse the time-energy and send the sphere backward to its starting-point. Then, in the midst of all my panic, of all my violent fear and topsy-turvy confusion, I felt a reluctance to return. Even in the bleak abyss that yawns unbridgeable between the stars, I was not allured by the thought of the stale and commonplace world I had left.

I began to recover something of stability, of mental equipoise. I remembered the bright flashes that had puzzled me. These, I now realized, had marked the passage of an alien sun and planetary system, coinciding in its orbit with the former position of the earth in space. If I went on in abstract time, other bodies would doubtless occupy the same position, in the everlasting drift of the universe. By slowing the movement of the sphere, it might be feasible to land on one of them.

To you, no doubt the sheer folly and madness of such a project will be more than obvious. Indeed, I must have been a little mad, from the physical and psychic strain of my unparalleled experience. Otherwise, the difficulties of the landing which I so coolly proposed to myself—not to mention the dangers—would have been glaringly manifest.

I resumed the time-flight, at a speed reduced by half. This, I calculated, would enable me to sight the next approaching orb in time to prepare for landing.

The darkness about us was unbroken for an interval of many ages. It seemed to me that eternity itself had gone by in the rayless void, ere a brilliant glare of light betokened a nearing sun. It passed us very close, filling half the heavens for an instant. Apparently there were no planets—or, at least none that came within sight.

Steadily we went on in time; till I ceased to watch the dial with its blurred and multiplied ciphers. I lived only in a dream of unreal and spectral duration. But somehow, after awhile, I knew that more than a million years had been traveled by the sphere.

Then, suddenly, another solar orb swam up before us. We must have passed through it, for the sphere was briefly surrounded by an incandescent flame, that seemed as if it would annihilate us with its intolerable flare. Then we were out of it, were suspended in black space, and a smaller, gleaming body was hurtling toward us.

This, I knew, would be a planet. I slowed the sphere to a rate of speed that would permit me to examine it. The thing loomed upon us, it whirled beneath us in a riot of massed images. I thought that I could distinguish seas and continents, isles and mountains. It rose still nearer, and appeared to surround us with swirling forms that were suggestive of enormous vegetable growths.

My hand was poised in readiness on the lever that would terminate our flight. As we swung dizzily amid the swirling forest, I brought the machine to a full stop, no doubt risking an instant destruction. I heard a violent crash, and the vessel rocked and reeled deliriously. Then it seemed to right itself, and stood still. It was lurching half to one side, and I had nearly been wrenched from my seat, while Li Wong was sprawling in an undignified position on the floor. But nevertheless, we had landed!

■

● Still giddy, and trying to regain my equilibrium, I peered through the crystalline walls on a weird and exuberant tangle of bewildering plant-forms. The time-machine was lodged between the swollen, liver-colored boles of certain of these plants and was hanging four or five feet in air above a pink and marshy soil from which protruded like sinister horns the brownish-purple tips of unknown growths.

Overhead, there were huge, pale, flabby leaves with violet veinings in which I seemed to detect the arterial throb of sluggish pulses. The leaves depended from the bulbous top of each plant like a circle of flattened arms from a headless torso.

There were other vegetable forms, all crowding and looming grotesquely in the green, vaporous air whose density was such as to give almost the appearance of a submarine garden to the odd scene. From every side I received a confused impression of python-like rattans, of poddy, fulsome, coral-tinted fronds and white or vermilion fungoid blossoms large as firkins. Above the jungle-tops, an olive-golden glimmering in the thick atmosphere betokened the meridian rays of a muffled sun.

My first feelings were those of astonishment—the scene before me was a source of giddiness to eye and brain. Then, as I began to distinguish new details in the medley of towering, outlandish shapes, I conceived a super-added emotion of horror, of veritable disgust.

At intervals there were certain immense, bowl-like flowers, supported on strong, hispid stems of a curious tripodal sort, and hued with the ghastly greens and purples of putrefying flesh. In these bowls the squat bulks of mammoth insects—or, rather, of what I took to be such at the moment—were crouching in an evil immobility with strange antennæ and other organs or members hanging down over the rims of the bowls.

These monsters appeared to mock the cadaverous coloring of the flowers. They were inexpressibly loathsome, and I shall not endeavor to describe their anatomy with any degree of minuteness. I shall, however, mention the three snail-like horns, ending in ruby-red eyes, that rose above their bodies and watched the forest around them with a baleful vigilance.

About the base of each of the tripodal stems, I perceived the carcasses of quaint animals, lying in a circle, in varying stages of decomposition. From many of these carrion, new plants of the same type as the bowl-flowers were issuing, with dark, ghoulish buds that had not yet unfolded.

As I studied these plants and their guardians with growing repulsion, a six-legged creature, something between a wart-hog and an iguana, emerged from the jungle

and trotted past within a dozen feet of the time-sphere. It approached one of the bowl-shaped blossoms, and sniffed at the hairy triple stem with a thin ant-eater snout. Then, to my horror, the squatting form in the bowl sprang forth with lightning rapidity and landed on the spine of the hapless animal. I saw the flash of a knife-like sting that was buried in the grotesque body. The victim struggled feebly, and then lay supine, while its assailant proceeded to make use of an organ that resembled the ovipositor of the ichneumon-fly.

All this was highly revolting; and even more repulsive was my discovery that the insect-form was actually a part of the flower in which it had been reposing! It hung by a long, pallid, snaky rope, like a sort of umbilical cord, from the center of the tilted bowl; and after the hideous thing had finished with its victim, the cord began to shorten, drawing the monster back to its lurking-place. There it squatted as before, watching for fresh prey with its ruby eyes. It was damnably obvious that the plant belonged to a semi-faunal genus and was wont to deposit its seeds (or eggs) in animal bodies.

I turned to Li Wong, who was surveying the scene with manifest disapprobation in his almond eyes.

"Me no likee this." He shook his head gravely as he spoke.

"Can't say that I care much for it, either," I returned. "Considered as a landing-place, this particular planet leaves a good deal to be desired. I fear we'll have to go on for a few more million or trillion years, and try our luck elsewhere."

I peered out once more, wondering if the other plant-types around us were all possessed of some disagreeable and aggressive character or ability, like the bowl-flowers. I was not reassured when I noticed that some of the serpentine rattans were swaying sluggishly toward the time-sphere, and that one of them had already reached it and was creeping along the wall with tiny tendrils that ended in suction-cups.

Then, from amid the curling vapors and crowding growths, a bizarre being appeared and ran toward the time-machine, barely avoiding one of the cord-suspended monsters as it launched itself from a tall blossom. The thing fell short of its intended prey by a mere inch or two, and swung horribly in midair like a goblin pendulum before it was retracted by the long, elastic cord.

● The aforesaid being was about the height of an average man. He was bipedal, but exhibited four arms, two of which issued from either side of his elongated, pillar-like neck and the other two from positions halfway down on his wasp-waisted thorax. His facial features were of elfin delicacy, and a high, fluted comb of ivory rose from his broad and hairless crown.

His nose, or what appeared to be such, was equipped with mobile feelers that hung down beside his tiny puckered mouth like Oriental mustaches; and his round, discoid ears were furnished with fluttering, streamer-like diaphanous membranes, thin as strips of parchment, on which were curious hieroglyphic markings.

His small, sapphire-brilliant eyes were set far apart beneath ebon semicircles that seemed to have been drawn with pigment on his pearly skin. A short cape of some flossy vermillion fabric served to cover his upper body; but, apart from this, there was nothing that one could distinguish as artificial raiment.

Avoiding several more of the plant-monsters, who lunged viciously, he neared the time-machine. Plainly he had seen us; and it seemed to me that his sapphire eyes implored us for succor and refuge.

I pressed a button which served to unlock and open the door of the sphere. As the door swung outward, Li Wong and I were assailed by numerous unearthly smells, many of which were far from pleasant. We breathed the surge of an air that was heavy with oxygen and was also laden with the vapors of unfamiliar chemical elements.

With a long, flying leap, the strange entity sprang in air and grained the crystal sill of the open machine. I caught the flexible three-fingered hands of his lower arms and drew him to safety. Then I closed the door, just as one of the cord-hung monsters hurtled against it, breaking its keen, steely-looking sting and staining the clear metal with a rill of amber-yellow venom.

"Welcome, stranger," I said.

Our guest was breathing heavily; and his facial feelers trembled and swayed with the palpitation of his fine, membranous nostrils. Apparently he was too breathless for speech; but he made a series of profound inclinations with his crested head, and moved his tenuous fingers with fluttering gestures that were somehow expressive of regard and gratitude.

When he had recovered his breath, and had composed himself a little, he began to talk in a voice of unearthly pitch, with sharp cadences and slowly rising intonations which I can compare only to the notes of certain tropic birds. Of course, Li Wong and I could only guess at his meaning, since the words, wherever distinguishable as such, were totally different from those of any human tongue or dialect.

We surmised, however, that he was thanking us and was also offering us an explanation of the perils from which we had rescued him. He seemed to be telling us a lengthy tale, accompanied with many dramatic gestures of an odd but eloquent sort. From certain of these, we gathered that his presence in that evil jungle was involuntary; that he had been abandoned there by enemies, in the hope that he would never escape from the wilderness of monstrous plants.

By signs, he told us that the jungle was of enormous extent, and was filled with growths that were even more dreadful than the bowl-flowers.

Afterwards, when we had learned to understand the language of this quaint being, we found that our surmises had been correct; but the narrative, in its entirety, was even stranger and more fantastical than we had imagined.

As I listened to our guest, and watched the swiftly weaving movements of his four hands, I became aware that a shadow had fallen upon us, intercepting the green, watery light of the blurred heavens. Looking up, I saw that a small air-vessel, of discoid form, surrounded with turning wheels and pointed wings that whirred like the sails of a windmill, was descending toward us and was hovering just above the time-machine.

Our guest perceived it also, and broke off abruptly in his story-telling. I could see that he was greatly alarmed and agitated. I inferred that the air-vessel belonged, perhaps, to his enemies, to the very beings who had left

him to a cruel doom in that fearsome terrain. No doubt they had returned to make sure of his fate; or else their attention had in some manner been attracted by the appearance of the time-sphere.

The alien ship was now hanging near the tops of the giant plants between whose boles the sphere had become lodged in landing. Through the silvery whirl of its wings and rotating wheels, I saw the faces of several entities who bore a general likeness to our guest, and were plainly of the same racial type. One of these beings was holding a many-mouthed instrument with a far-off resemblance to the Gatling gun, or mitrailleuse, and was aiming it at the time-machine.

Our passenger gave a piercing cry, and clutched my arm with two of his hands while he pointed upward with the others. I required no interpreter, and no lengthy process of reasoning, to understand that we were in grave danger from the foreign vessel and its occupants. I sprang immediately to the instrument board, and released the lever that would send us onward in time at the utmost speed of which the machine was capable.

CHAPTER III

The Flight Through Time

● Even as I pulled the lever, there came from the ship a flash of cold and violescent light that seemed to envelop the time-sphere. Then all things in the world without were resolved into a flying riot of formless, evanescent images, and around us once more, after a brief interval, was the ebon darkness of interstellar space. Again the ship was filled with momentary, repeated phantoms, to which were added those of our curious guest. Again the dials, the levers and the dynamos multiplied themselves in a dim, phosphorescent glow.

Later, I learned that our flight into forward æons had saved us from utter annihilation only by the fraction of a second. The force emitted by the many-mouthed weapon on the air-vessel would have turned the sphere into vanishing vapor if we had sustained it for more than a moment.

Somehow, I managed to clamp myself into the seat once more, and sat watching the weirdly manifolded hands and ciphers that registered our progress in universal time. Fifty thousand years—a hundred thousand—a million—and still we floated alone in the awesome gulf of the everlasting cosmic midnight. If any suns or planets had passed us during the interim, they had gone by at a distance which rendered them invisible.

Li Wong and the new passenger had clutched at the handles of the lockers in which our provisions were stored, to keep themselves from drifting aimlessly about in midair. I heard the babble of their voices, whose every tone and syllable was subdivided into a million echoes.

A peculiar faintness came upon me, and a dream-like sense of the unreal and irrational attached itself to all my impressions and ideas. I seemed to have gone beyond all that was conceivable or comprehensible, to have overpassed the very boundaries of creation. The black chaos in which I wandered was infinitely lost from all direction and orientation, was beyond life itself or the memory of life; and my consciousness seemed to flicker and drown in the dark nullitude of an incommensurable void.

Still we went on along the ages. On the far-off, receding earth, as well as on other planets, whole civilizations had evolved and elapsed and been forgotten, and many historical epochs and geological eras had gone by. Moons and worlds and even great suns had been destroyed. Travelling down their eternal orbits, the very constellations had all shifted their stances amid the infinite. These were inconceivable thoughts; and my brain was overwhelmed by the mere effort to visualize and comprehend their awfulness.

Strangest of all was the thought that the world I had known was lost not only in sidereal immensity, but in the rayless night of a remote antiquity!

With more than the longing of a derelict sailor, adrift on chartless seas, I desired to feel underfoot once more the stable soil of *terra firma*—no matter where, or what. We had already made one landing in the dizzy labyrinth of time and space; and somewhere, somehow, among the æons through which we were passing, another cosmic body might offer itself, intersecting in its spatial path our own position in abstract time.

Again, as before our initial landing, I slowed our progress to a rate that would allow inspection of any sun or world we might happen to approach.

There was a long, dreary interval of waiting, in which it seemed that the whole universe, with all its systems and galaxies, must have gone by us and left us hanging alone in the void that lies beyond organized matter. Then I became aware of a growing light; and, retarding the time-machine still further, I saw that a planet was nearing us; and beyond the planet were two larger fiery bodies that I took for a binary system of ours.

Now was our opportunity, and I determined to seize it. The new planet whirled beneath us, it rolled upon us amain, as we still moved in time at a rate whereby whole days were reduced to minutes. A moment more, and it rose from the gulf like some gigantically swelling bubble to surround us with a maze of half-cognizable imageries. There were Atlantean mountain-tops through which we seemed to pass, and seas or level deserts above which we appeared to hover in the midst of broken cloud-strata. Now, for an instant, we were among buildings, or what I assumed to be such; then we were hurled onward to a broad, open space. I caught a confused glittering of many-pointed lights and unidentifiable, thronging forms, as I reached out and brought the sphere to a sudden halt.

As I have said before, it was a perilous thing to stop thus in accelerated time above a moving planet. There might well have been a collision that would have destroyed the machines; or we might have found ourselves embedded beneath fathoms of soil or stones. Indeed, there were any number of undesirable possibilities; and the only wonder is that we escaped annihilation.

As it was, we must have come to a halt in midair, perhaps fifteen or twenty feet above the ground. Of course, we were seized immediately by the gravitational influence of the new world. Even as my sense-impressions cleared with the cessation of the time-flight, we fell with a terrible, ear-splitting crash, and the sphere almost seemed to rebound and then rolled over, careening on its side. I was torn from my seat by the shock of impact, and Li Wong and our passenger were hurled to the floor beside me. The stranger and myself, though sorely bruised and shak-

en, contrived to retain consciousness; but I saw that Li Wong had been stunned by the fall.

● Giddily, with swaying limbs and reeling senses, I tried to stand up, and somehow succeeded. My first thought was for Li Wong, who was lying inert against the tilted dynamos. A hasty examination showed me that he was uninjured. My second thought was for the time-machine, whose tough metal revealed no visible damage. Then, inevitably, the world into which we had fallen in a manner so precipitate was forced upon my attention.

We had come down in the very center of what appeared to be an active battle-field! All around us was a formidable array of chariot-like vehicles, high-wheeled and high-bodied, drawn by quaint monsters that recalled the dragons of heraldry, and driven by beings of an unearthly kind who were little more than pygmies.

There were many foot soldiers, too, and all were armed with weapons such as have never been used in human history. There were spears that ended in curving, saw-toothed blades, and swords whose hilts were in the middle, and spiked balls at the end of long, leathern thongs, which were hurled at the enemy and then drawn back by their owners. Also, each of the chariots was fitted with a catapult, from which similar balls were flung.

The users of these weapons had paused in the midst of what was plainly a ferocious battle, and were all staring at the time-machine. Some, I saw, had been crushed beneath the heavy sphere as it plunged among them. Others had drawn back, and were eyeing us doubtfully.

Even as I surveyed this singular scene, with bewilderment that permitted no more than a partial cognizance of its baffling details, I saw that the interrupted combat was being resumed. The monster-drawn chariots swayed back and forth, and the air was thick with flying missiles, some of which hurtled against the walls of the sphere. It seemed, perhaps, that our presence was having an effect on the morale of these fantastic warriors. Many of us who were nearest to the sphere began to retreat, while others pressed forward; and I was able for the first time to distinguish the members of the two factions, who obviously belonged to different races.

Those of one faction, who were all foot-soldiers armed with spears and swords, were seemingly a rude barbaric type. They outnumbered the others greatly. Their fearsome, uncouth features were like graven masks of fury and malignity; and they fought with a savage desperation.

Their opponents, who comprised all the chariot-drivers, as well as a smaller body of foot-soldiers, were more delicate and civilized in appearance, with slighter limbs and anatomies. They made a skillful use of their catapults; and the tide of the battle seemed to be turning in their favor. When I perceived that all those who had been struck down by the time-machine belonged to the more barbarous type, I inferred that possibly our apparition had been construed as favorable to one faction and inimical to the other. The catapult-users were gaining courage; and the spear and sword bearers were becoming visibly demoralized.

The combat turned to an ever-growing rout. The corps of chariots gathered in a crushing mass about the time-sphere and drove the enemy swiftly back, while, in the heat of conflict, a barrage of singular weapons continued to assail our hyaline walls.

Ferocious-looking as they were, the dragons seemed to take no active part in the struggle, and were plainly mere beasts of draught or burden. But the slaughter was terrific; and crushed or trodden bodies were lying everywhere. The role of *deus ex machina* which I appeared to be playing in this outlandish battle was not one that I should have chosen of my own accord; and I soon decided that it would be better to fare even further afield in universal time.

I pulled the starting-lever; but, to my confoundment and consternation, there was no result. The mechanism in some manner had been jarred or disconnected by the violence of our fall, though I could not locate the precise difficulty at that moment. Afterwards, I found that the connection between the instrument-board and the dyamos had been broken, thus rendering the force inoperative.

Li Wong had now recovered consciousness. Rubbing his head, he sat up and appeared to be pondering our remarkable *milieu* with all the gravity of an Oriental philosopher. Our passenger was peering out with his brilliant sapphire eyes on this world to which he was no less alien than Li Wong and myself. He seemed to be eyeing the odd warriors and their dragon-teams with a cool, scientific interest.

The more civilized of the two factions was now driving its enemies from the field in a tide of carnage. Our soundproof walls prevented us from hearing the crash and rumble of chariot-wheels, the clangor of clashing weapons, and the cries that were doubtless being emitted by the warriors.

Since nothing could be done at the moment to repair our machinery, I resigned myself, not without misgivings, to an indefinite sojourn in the world whereon we had landed so fortuitously.

● In perhaps ten minutes the raging battle was over, the unslain remnant of the barbarians was in full flight, and the conquerors, who had poured past us in an irresistible torrent, were returning and massing about the sphere at a little distance.

Several, whom I took for commanding officers, descended from their cars and approached us. They prostrated themselves before the machine in the universal posture of reverence.

For the first time, I was able to form an exact impression of the appearance of these beings. The tallest of them was barely four feet in height, and their limbs, which were normal in number according to human ideas, were slender as those of elves or leprechauns. Their movements were very swift and graceful, and were seemingly aided by a pair of small wings or erigible membranes attached to their sloping shoulders.

Their faces were marked by a most elaborate development of the nostrils and eyes; and the ears and mouths were little more than vestigial by contrast. The nasal apparatus was convoluted like that of certain bats, with mobile valves arranged in rosettes, and a nether appendage that recalled the petals of a butterfly orchid. The eyes were proportionately enormous and were set obliquely.

They were furnished with vertical lids and possessed a power of semicircular rotation and also of protrusion and

retraction in their deep orbits. This power, we learned later, enabled them to magnify or reduce any visual image at will, and also to alter or invert the perspective in which it was seen.

These peculiar beings were equipped with body-armor of red metal marked off in ovoid scales. Their light-brown arms and legs were bare. Somehow their whole aspect was very gentle and un-warlike. I marvelled at the prowess and bravery which they had shown in the late battle.

They continued their obeisances before the time-machine, rising and prostrating themselves anew, in an alternation like a set ritual with gestures and genuflections of hieratic significance. I conceived the idea that they regarded the machine itself as a conscious, intelligent and perhaps supernal entity; and that we the occupants, if perceived at all, were considered as internal and integral parts of the mechanism.

Li Wong and I began to debate the advisibility of opening the door and revealing ourselves to these fantastic devotees. Unluckily, I had neglected to provide the sphere with any device for determining the chemical composition of other-world atmospheres; and I was not sure that the outside air would prove wholly suitable for human respiration. It was this consideration, rather than any actual fear of the mild, quaint warriors, that caused me to hesitate.

I decided to defer our epiphany; and I was about to resume my examination of the deranged machinery, when I noticed an ebullition in the massed ranks of soldiers that were drawn up around us at some little distance. The ranks parted with a swift, flowing motion, leaving a wide lane through which, presently, a remarkable vehicle advanced.

The vehicle was a sort of open platform mounted on numerous low, squat wheels, and drawn by a dozen of the dragon-creatures, arranged in teams of four. The platform was rectangular, and the small, castor-like wheels served to elevate it little more than a foot above the ground. I could not determine its material, which was copperish in color and suggested a heavily metallic stone rather than a pure, smelted metal. It was without furnishings or superstructure, aside from a low breastwork at the front, behind which three drivers stood, each holding the separate reins of a tandem of monsters. At the rear, a strange, outward-curving arm or crane of some black, lustrous material ending in a thick disk, rose high in the air. One of the elfin people stood beside this [illegible]

With exquisite and admirable skill, the drivers brought their unwieldy conveyance forward in a sweeping arc through the empty space between the time-vessel and the surrounding army. The devotees of the sphere, who must have been commanding officers, retired to one side; and the monster-hauled vehicle, passing us closely, was adroitly manuevered and drawn about till it came to a halt with its rear end opposite the sphere and the black arm inclining above our very heads with its heavy horizontal disk.

The being who stood beside the curving arm began to manipulate an oddly shaped and movable projection (which must have been a sort of lever or control) in its dark surface. Watching him curiously, I became aware of a sudden and increasing glare of light overhead; and looking up, I saw that a lid-like cover was sliding back from the disk at the arm's end, revealing a fire-bright substance that dazzled the eye.

Simultaneously, I felt a sensation of corporeal lightness, of growing weightlessness. I reeled with vertigo, and reaching toward the wall in an effort to steady myself, I floated buoyantly from the floor and drifted in mid-air. Li Wong and the stranger, I perceived, were floundering eerily and helplessly about amid the machinery.

Perplexed by this phenomenon of degravitation, I did not realize at first that there had been a similar levitation of the time-sphere itself. Then, as I turned in my aerial tumbling, I saw that the sphere had risen from the ground and was now on a level with the floor of the strange conveyance. It occurred to me that an unknown magnetic force was being emitted by the bright disk above our heads.

No sooner had I conceived this idea than the outward-curving arm began to rotate, swinging back upon the vehicle of which it formed a part; and the time-machine, as if suspended by invisible chains, swung with it, maintaining a vertical position beneath the moving disk. In a trice, it was gently deposited on the platform. Then, like the switching-off of a light, the glaring disk was covered again by its dark lid, and the properties of normal weight returned to my companions and to me.

CHAPTER IV

The Great Battle

The whole process of loading the sphere upon the platform had been accomplished with remarkable celerity and efficiency. As soon as it was completed the three drivers, in perfect concert, reined their animals about in a long semicircle, and started off on the route by which they had come. Moving at considerable speed, we rolled easily along the wide lane that had been opened through the quaint army. The chariots and foot-soldiers closed behind us as we went; and looking back, I saw them wheel about and reform, with the chariots in the van. Passing through the outmost ranks, we took the lead, and the whole army followed us in martial order across a low plain.

I was struck by the seeming discrepancy between the preter-human control of gravitation possessed by this curious people, and their somewhat primitive modes of warfare and conveyance. Judging them, as I did, by terrestrial standards, I could not reconcile these things; and the true explanation was too bizarre and fantastic for me to have imagined it beforehand.

We proceeded toward our unknown destination, with the dragons trotting at a leisurely pace that covered more ground than one would have expected. I began to observe the surrounding *milieu* and to take note of much that had escaped me heretofore.

The plain, I saw, was treeless, with low hummocks and intervals of winding mounds, and was wholly covered with a short, lichenous growth that formed a kind of yellow-green turf. One of the two suns was hanging at meridian; and the other was either just rising or setting, for it hovered close to a far-off horizon of glaucous hills. The sky was tinted with deep green, and I saw that this color was due to the combined light of the suns, one of which was azure blue and the other verging upon amber.

After we had gone on for several miles and had passed a row of intervening hummocks, I beheld a strange city in the near distance, with low mushroom domes and peristyles of massive pillars that gleamed like rosy marble in the sunlight amid plots of orange and indigo and violet vegetation.

This city proved to be our objective. It was thronged with people, among whom we passed on the dragon-drawn platform, borne like the trophies of a triumph. The buildings were roomy and well-spaced and were characterized by deep porticoes with swelling, bulbous columns. We learned subsequently that the material used in their construction was a sort of petrified wood, belonging to a genus of giant prehistoric trees, that had been quarried in enormous blocks.

After passing through many streets, we neared, in what was apparently the center of the town, a huge circular edifice. It consisted of a single dome upborne on rows of open, colossal pillars, with an entrance broad and high enough to admit with ease the vehicle on which the time-sphere was being carried. We rolled smoothly through the portals and along a level pavement beneath the vast dome.

The place was illumed by the horizontal rays of the sinking yellow sun, which fell on the ruddy floor in broad shafts between the massy pillars. I received an impression of immense empty space, of rosy-golden air and light. Then, in the center, as we went forward, I saw a sort of dais on which stood an extraordinary machine or contrivance of parti-colored metals, towering alone like an idol in some pagan fane.

The dais, like the building, was circular, and rose four or five feet above the main pavement. It was perhaps sixty feet in diameter, and there were several stairs, graduated to the steps of the pygmy people, that gave access to it. Around the dais, in semi-circles on the pavement, with ample space between, there stood many low tables, supported on carven cubes and with benches about them, all of the same material as the edifice itself. The tables were set with numerous black pots, deep and shallow and multiform, in which grew flowers of opulent orange and cassava colors, together with others of delicate white, of frail pink and silvery green.

These details I perceived hastily and confusedly as our conveyance moved on toward the central dais without endangering any of the tables. A sprinkling of people, who gave the impression of menials, were hurrying about the place, bringing new flower-pots or re-arranging certain of the ones that had already been disposed. Many of the elfin warriors, dismounting from their chariots, had followed us through the great portals.

Now the vehicle had drawn up beside the dais. By the operation of the black arm with its magnetic disk, the time-machine was lifted from the platform and deposited on the dais not far from the tall contrivance of multi-colored metals. Then, circling the dais, the vehicle withdrew with its dragon-team and vanished through the open entrance.

● Whether the place was a temple or merely a public hall, I could not decide. It was like the phantasmagoria of some bewildering dream, and the mystery of it all was not solved when I noticed that hundreds of the faery people were seating themselves at the flower-laden tables and were bending toward the blossoms with a regular contraction and expansion of their voluted nostrils, as if they were inhaling delicious perfumes. To complicate my bewilderment still further, I could distinguish nothing on any of the tables in the form of food, nourishment or even drink, such as these heroic warriors might well be expected to require after an arduous battle.

Dismissing temporarily the baffling enigma, I turned my attention to the peculiar mechanism which occupied the dais together with the time-sphere. Here, too, I found myself at a loss, for I could not even surmise its nature and purpose. I had never seen anything like it among the most ingenious, pernicious and grotesque inventions of terrene mechanics.

The thing was quite gigantic, with a bristling, serried and fearsome array of highly polished rods and pistons. It had long, spiral bands and abrupt, angular flanges, behind which I made out the half-hidden outlines of a squat cylindrical body, mounted on at least seven or eight ponderous legs that terminated in huge pads like the feet of hippopotami.

Above the complicated mass there towered a sort of triple head, or superstructure of three globes, one above the other on a long metal neck. The heads were fitted with rows of eye-like facets, cold and bright as diamonds, and possessed numerous antennæ and queer, unnameable appendages, some of great length. The whole apparatus had the air of some mysterious living entity—a super-machine endowed with sentience and with intellect; and the three-tiered head with its chill eyes appeared to watch us malignly and inscrutably like a metal Argus.

The thing was a miracle of machinery; and it gleamed with hues of gold and steel, of copper and malachite, of silver and azurite and cinnabar. But more and more I was impressed by an evil and brooding intentness, an aura of the sinister and the inimical. The monstrosity was motionless—but intelligent. Then, as I continued my inspection, I saw a movement of the foremost legs, and became aware that the machine was advancing stiffly on its massive pads toward the time-vessel.

It paused at an interval of five or six feet, and put out a long, thin, supple, many-jointed tentacle from the mass of appendages that adorned its topmost head. With this tentacle, like a raised whip, it struck smartly several times at the curving wall of the sphere.

I could not help feeling somewhat alarmed as well as puzzled; for the action was unmistakably hostile. The blows of the tentacle were somehow like a challenge—the equivalent, so to speak, of an actual slap in the face. And the wary movement with which the machine stepped back and stood facing us, after delivering the whip-sharp blows, was curiously like the manœuvre of a fighter, squaring himself for combat. The thing seemed almost to crouch on its elephantine metal legs and pads; and there was a air of covert menace in its poised array of mysterious, deadly-looking parts and appendages.

At this moment there occurred a singular interruption which, in all likelihood, was the means of averting our death and the destruction of the time-globe. A group of the elfin people, four in number, ascended the stairs of the dais and approached us, bearing among them a large vessel, like an open shallow urn or deep basin, which was filled to the brim with a sluggish, hueless liquid, suggesting immediately some sort of mineral oil. Behind this

group there came a second, carrying another vessel full of the same oleaginous fluid.

The two delegations, moving forward in perfect unison, deposited their burdens at the same instant, with the same peculiar genuflections, setting one of the basins before the time-sphere and the other at the feet of the belligerent alien mechanism. Afterwards they retired discreetly as they had come. The whole performance had the air of a religious rite—a sacrificial offering, intended to appease doubtful or angry deities.

Not without inward amusement, I wondered what use the time-sphere was supposed to make of the oily liquid. It seemed probable that we and our conveyance were regarded as a single mechanism, active and intelligent, and perhaps similar in kind to the curious robot we had found occupying the dais.

The latter machine, however, was manifestly familiar with such offerings; for, without acknowledgment or ceremony, it proceeded to stoop over and dip certain of its metal proboscides in the oil. These organs, I perceived, were hollow at the ends, like the trunks of elephants; and I saw that the liquid in the basin was diminishing rapidly, as if it were being sucked up.

When the vessel was half empty, the monster withdrew its proboscides; and then, by the simultaneous use of these members, turning and coiling with great suppleness in different directions, it began to oil the innumerable joints and flanges of its intricate machinery. Several times it suspended this remarkable process, eyeing the time-sphere balefully as if watching for a hostile movement. The whole performance was inconceivably grotesque and ludicrous—and sinister.

The main floor of the huge pillared hall, I now saw, had filled with the pigmy warriors, who were seated about the flower-burdened tables. All of them seemed to be inhaling the odors of these flowers in a manner that resembled actual ingustation; and I conceived the idea that they were regaling themselves with a feast of perfumes and perhaps required no other nutriment.

● Turning from this quaint spectacle, to which I had given only a cursory glance, I perceived that the metal monster had apparently finished the anointing of its complex machinery and was again posting itself in an attitude preparatory for battle. There was a stealthy turning of half-hidden wheels and cogs, a covert throbbing of well-oiled pistons, as the mechanism faced us; and certain of its tentacles were poised in air like lifted weapons.

What would have happened next, in the normal course of events, I am not altogether sure; but the probabilities are that we would have been blotted out of existence very promptly, efficiently and summarily. Again, by a singular intervention, the time-vessel was saved from the anger of its strange antagonist.

Without warning, there came a flash of brilliant blinding flame, as if a thunderbolt had issued from mid-air between the dais and the dome. There was a crashing, shivering noise that shook and penetrated our virtually sound-proof walls; and everything about us seemed to rock with the convulsions of a violent earthquake. The concussion hurled us back upon our dynamos; and I thought for an instant that the sphere would be flung from the dais. Recovering myself, I saw that a third machine had materialized on the dais, opposite the time-sphere and its opponent!

This machine differed as much from the hostile robot as the latter, in its turn, differed from the time-globe. It was a sort of immense polyhedron, with an arrangement of numberless facets alternately opaque and transparent. Through some of the facets, clearer than glass, I was horrified and astonished to behold the thronging faces of entities similar to, or perhaps identical with, the beings who had threatened us from the air-vessel in that far-off world where we had picked up our unusual passenger.

There could be only one explanation: we had been pursued through the cosmic continuum by these vengeful and pertinacious creatures, who had evidently employed a time-space vehicle of their own. They must have possessed unique instruments of incredible range and delicacy by which to detect and follow our course in the labyrinth of stellar gulfs and ages! Turning to our passenger, I saw by his troubled air and frantic gestures that he too had recognized the pursuers. Since I had not yet been able to repair our machinery, the position in which we now stood was a serious dilemma. We were without weapons of any kind, for it had not even occurred to me to bring along a revolver. I began to wish that I had fitted the time-machine with the arsenal of an American racketeer.

However, there was little time for either regret or apprehension. The course of events was now taking an unforeseen and incalculable turn. The formidable robot, diverted from its war-like designs upon us by the appearance of the newcomer, had immediately squared itself around to face the polyhedron, with its metal members raised in a flailing gesture of menace.

The occupants of the polyhedron, on their part, seemed to disregard the robot. Several of the opaque facets began to slide back in the manner of ports, and revealed the yawning mouths of tubular weapons, all of which were levelled at the time-sphere. It appeared that these people were intent only on destroying us, after having followed us with fantastical vindictiveness through many aeons.

The robot, it would seem, construed the opening of the ports as an act inimical to itself. Or perhaps it did not wish to yield its legitimate prey, the time-sphere, to another and foreign mechanism. At any rate, it bristled forward, winnowing the air with all its tentacles and proboscides, and tramping heavily on the dais with its myriad pads, till it stood within grappling-distance of the polyhedron.

Coils of greyish vapor were beginning to issue from valves in its cylindrical body and pipe-like throat; and raising one of its hollow proboscides, it snorted forth a sudden jet of crimson flame—a briefly flaring tongue that struck an upper facet of the polyhedron, causing it to melt and collapse inward like so much solder.

The occupants of the alien time-machine were now slewing their tube-weapons around to face the robot. A violent fire leaped from one of the tubes, spreading like a fan, and severing cleanly an upraised tentacle of the monster.

At this, the angry mechanism seemed to go mad, and hurled itself at the polyhedron like some enormous octopus of metal. Jets of scarlet fire were issuing from several of its trunk-shaped organs, and great ruinous rents appeared in the facets of the polyhedron beneath their incessant playing.

Undismayed by this, the wielders of the tube-weapons concentrated their violet beams on the robot, inflicting terrific damage. The uppermost of the three globular heads was partly shot away, and metal filaments trailed from its broken rim like a shredded brain. The serried array of tossing members was torn and lopped like a flame-swept forest. Rods, cogs, pistons and other parts dripped on the dais in a molten rain. Two of the foremost legs crumpled in shapeless ruin—but still the monster fought on; and the polyhedron became a twisted wreck beneath the focussing of the red fires.

Soon several of the violet beams were extinguished, and their wielders had dissolved into vapor and ashes. But others were still in action; and one of them struck the central cylinder of the robot, after demolishing the outer machinery, and bored into it steadily like an acetylene torch. The beam must have penetrated a vital part, for suddenly there was a tremendous, all-engulfing flare, a cataclysmic explosion.

The immense dome appeared to totter on its trembling columns, and the dais shook like a stormy sea. Then, an instant later, there fell from a dark cloud of swelling steam, a rain of metal fragments, glancing along our crystalline sides and strewing the dais and the main floor for some distance around. The monster, in its explosion, had involved the alien time-vessel, which was wholly riven asunder; and nothing remained of our pursuers but a few blackened cinders.

Apart from this mutual and highly providential destruction of the inimical mechanisms, no serious damage had been done; for the main building, I now perceived for the first time, was deserted—the pygmies had abandoned their feast of odors and had retired discreetly, perhaps at the very onset of the battle. The time-sphere, though it had taken no part in the combat, was left by a singular and ironic fortuity in sole possession of the field.

I decided that fortune, being so favorably disposed toward us, might be tempted even further with impunity. So I opened the door of the vessel, and found that the atmosphere of the world outside was perfectly breathable, though laden with an odd mixture of metallic fumes that lingered from the late explosion, and fruity and luscious fragrances from the potted blossoms.

CHAPTER V

The World of Mohaun Los

● Li Wong and the passenger and I emerged on the dais.

The yellow sun had gone down, and the place swam with the blue, religious light of its ascendant binary. We were examining the littered ruins of the strange machines when a large delegation of elfin warriors re-entered and approached us. We could not divine their thoughts and emotions; but it seemed to me that their genuflections were even more expressive of profound reverence and gratitude than those with which the time-sphere had been hailed after the routing of the barbarian army. I received an almost telepathic impression that they were thanking us for a supposed act of deliverance at which we had been merely the onlookers.

In time, this impression was to be fully confirmed. The metal monster, it seemed, had come originally, like ourselves, from the outside universe, and had settled itself among this perfume-eating people. They had treated it with all due respect, had housed it in their public hall of assembly and had supplied it liberally with certain mineral lubricants which it required. The machine, in exchange, had deigned to instruct them regarding a few scientific and mechanical secrets such as that of degravitation by means of a reverse magnetic force; but the people, being somewhat non-inventive and non-mechanical by nature, had made little use of this robot-imparted knowledge.

The metal monster, in time, had become disagreeably exacting and tyrannical; and moreover, it had refused flatly to help the pigmies in their war with another people when need arose. Therefore they were glad to be rid of it; and they seemed to take it for granted that we had made away with the monster as well as with the invading time-machine. So far, I have not thought it worth while to disillusion them.

No less than seven terrestrial months have now gone by since the landing of the sphere. My companions and I are still sojourning among the perfume-eaters; and we have no reason to complain of our lot, and no cause to lament the worlds we have left so far behind us in time and space.,

In the interim, we have learned many things, and are now able to hold converse with our hosts, having familiarized ourselves by slow degrees with the peculiar phonetics of their speech.

The name of the world, as well as I can render it in human spelling, is Mohaun Los. Being subject to the gravitational pull of two solar bodies, it follows a somewhat eccentric and prolonged annual orbit. Nevertheless, the climate is equable and salubrious, though marked by meteoric phenomena of an unearthly sort.

The people among whom we are dwelling call themselves the Psounas. They are a fine and estimable race, though bizarre from a human standpoint as any of the mythic tribes whose anatomy and customs were described by Herodotus. They are the ruling race of the planet, and are inconceivably more advanced in many ways than their rude weapons and methods of warfare would lead one to imagine. Astronomy and mathematics, in particular, have been developed by them to a degree that is far beyond the achievement of human savants.

Their food consists of nothing grosser than perfumes; and at first, it was not easy to convince them that we required a more material nourishment. However, once they had grasped the idea, they supplied us abundantly with the meaty foods in which Mohaun Los abounds; and they did not seem to be shocked or scandalized by our base appetites—even though fruits and other non-atomizable matters are eaten only by animals and the more aboriginal races of this world. The Psounas, indeed, have shown toward us at all times a spirit of urbane tolerance and *laissez faire*.

They are a peaceful race, and during their whole former history have had little need to acquire the martial arts. But the recent evolutionary development of a half-bestial tribe, the Gholpos, who have now learned to organize themselves and to make weapons, and have become quite aggressive as a consequence, has compelled the Psounas to take the field in self-defense.

● The descent of the time-machine, falling upon their enemies during a crucial battle, was a most fortunate

(*Continued on page* 278)

(*Illustration by Paul*)

Deliberately he lunged through the air. Too late he saw his mistake. He was floating toward the other helplessly with no way to stop.

THE SPACE COFFIN

BY A. ROWLEY HILLIARD

● It is difficult to tell much about this unusual story, without giving away its central mystery. You will learn however, the extremes to which men go in order to accomplish their aims, whether such aims be for or against law and order.

Here, in this story, we have a scientific intrigue, that reaches its hands far into the American nation. In the kidnapping mystery, and the boldness of the kidnappers, the contrast to the terrible Lindbergh case is marked. The motives behind the kidnappings in this story may be compared with the fiendish brutality that accompanied the Lindbergh tragedy.

At any rate, this is a story you should enjoy.

● "It was done in a moment . . . I turned away from the breeze to light my pipe. The night was dark, the flare of the match blinded me for a minute; so when I heard a grunt behind me I grabbed my electric torch . . . But he was gone!"

John Hand shrugged, and puffed calmly on the big, black pipe that had been his undoing.

"Ye say yerself and Ostermann were out walking in the garden. Weren't ye a bit foolish to allow him out of the house, Mr. Hand?"

John Hand puffed a little more quickly at the pipe—an ominous sign. His temper was short today. And McQuerdle was dragging this old story out of him again—for the half-dozenth time.

"As I've told you before," he said, without the deferential air that should be used towards a boss, "the garden was surrounded by two hundred Swedish police and soldiers—good men. A cat couldn't have got in or out."

"Ah—h!" Andrew McQuerdle, Chief of the Secret Service Division, U. S. Government, could be painfully irritating on occasion. The peace of mind of his operatives was no concern of his. "Ah! . . . And so ye have taken up the study of occultism and the more theoretical sciences to explain yer failure! It has been five months since ye allowed Johann Ostermann to be spirited away right under yer nose—and what have ye done since then? Ye know that only by a presidential order have Secret Service men been put on this case. And now as far as I can make out from yer reports ye've spent most of yer time in libraries, universities, astronomers' observatories, and other institutions of the more useless sort of learning. Ye are going a long way to explain a simple failure in detective work, Mr. Hand. I begin to doubt your sanity; and I cannot doubt your uselessness to this department!"

Although stung, John Hand gave no sign. "The Adjustors don't work by ordinary methods, sir; and you've got to meet them on their own ground. When a man disappears in thin air, why you . . ."

"Ye feel obliged to seek the aid of Einstein—is that it, Mr. Hand?"

John Hand remained impervious to the other's sarcasm. "You've got to find out how it happened, of course . . ." He looked earnestly across the desk at his superior. This moment was an important one in John Hand's career. For two years now he had been on the trail of "The Adjustors", a trail hard to follow; a bewildering trail full of gaps, false leads, and sudden, unpredictable shifts.

The trail was a long one: New York, Los Angeles, Tokio, Berlin, Paris, Kimberley, Stockholm; far and wide it led, with John Hand following, dogged and baffled, always a step or two behind—until now. Now for the first time he was a step ahead; now at last he felt he could meet his opponents on even terms. He couldn't be sure, of course; you could never be sure with the Adjustors; but the mere possibility filled him with an exultant excitement, for, like all born fighters, John Hand loved a worthy enemy.

When he next spoke his tone was almost pleading. "I believe I can convince you of my usefulness tonight, sir. If the Adjustors get away with Van Swerigen, I'll admit my failure . . . But I've got to get to Cleveland in a hurry . . ."

"No-o- . . ." McQuerdle shook his head judiciously. "No, Mr. Hand; I am afraid ye've gone stale on the case. I am going to take ye off it."

"But, sir! You'll let me go to Cleveland tonight, won't you? I'd stake my life on getting 'em this time . . . Give me a last chance, sir!"

Andrew McQuerdle shook his head. "Tomorrow morning the President leaves Washington on his Western trip. Ye will join his bodyguard, Mr. Hand. Ye'll have no time for Cleveland."

It seemed to John Hand that, in this moment, he had reached the climax of long years of dissatisfaction and unpleasantness on the job. He was bound to face the fact sooner or later that he neither liked nor trusted his immediate superior in the department. He faced it now. Andrew McQuerdle did not command his respect—never had.

It was not merely his rough and graceless manner of handling his men; there was a strange something behind

that—something sly and unsatisfying, which John Hand felt rather than understood. He remembered Peters, discharged for bribe-taking. Peters was honest as the day is long, and Peters had known something; but John Hand had tried to pump him in vain.

He decided to make a last appeal . . . "But, sir—"

"That is final, Mr. Hand! Ye will make yer formal report on the case, with all possible speed, so that we can take care of the matter . . . Ye may go."

John Hand did not move. "I doubt if you could take care of it," he said quietly. His face was perfectly calm, but the heavy clouds of grey pipe-smoke billowing towards the ceiling told a different story. Prepared as he must have been for anything that this man might do, he could not avoid a shock of surprise. He was being demoted—reduced to the ranks—taken off the job after two years of effort, and on the very eve of success!

● McQuerdle snorted. "What, man? Of course we can take care of it! Ye believe there will be a kidnapping tonight in Cleveland, do ye not? . . . Then what is to prevent us from capturing the kidnappers?"

John Hand took his pipe from his mouth and looked at it thoughtfully. "They won't be there," he said.

"Eh . . . ?"

"They will and they won't," said John Hand obscurely.

McQuerdle was irritated. After breathing hard for a minute, he said stiffly, "that will be all, Mr. Hand. Ye will make yer report . . ."

"I will not make a report," said John Hand.

Andrew McQuerdle's mouth dropped open, and he hitched himself forward in his chair. "Ye will not . . ."

"I will not." John Hand was studying the ceiling with mild eyes, apparently interested in the whirls and convolution of the grey-blue smoke collected there.

McQuerdle mastered his breathing with an effort. "Mr. Hand, I cannot allow ye to question my authority!" He paused, but John Hand said nothing. "Ye will hand me the complete report before three o'clock."

John Hand's interest in the ceiling had not waned, apparently. He was too absorbed to speak. Andrew McQuerdle's breathing was again becoming difficult. "Ye may go!" he said hastily.

John Hand went. He left the Treasury Building; crossed Pennsylvania Avenue; entered his bank. He inquired about his balance, and withdrew the whole. He took a taxi to his home, and for three-quarters of an hour talked earnestly to his wife. He left her most of the money; and they parted lovingly and as cheerfully as possible under the circumstances. He went to the Washington airport; engaged a plane; and said to the pilot, "New York."

John Hand did not want to go to New York. He could ill spare the time. But he and his wife had agreed that he must see Gordon Wintermaine at once. It was with no little trepidation that he looked forward to the interview.

John Hand was one of "Wintermaine's Young Men"—as they were known in 1940, when the "Personal Mortgage" was still in its experimental stages.

Now that the Personal Mortgage is an accepted part of our daily lives, it is hard to understand the excitement and the almost universal hostility that it caused when Gordon Wintermaine introduced it in 1935. Now it seems indispensable; then it was denounced as madness. They called Gordon Wintermaine a lunatic; but they could not disregard him, because he was one of the most interesting figures of his time.

He was the scion of a great international banking house—born to control great sums of money; sway governments; make and unmake wars; and do all the tremendous things an international banker does. For a number of years he did those things, but he was not cut out for the work. His blood was warmer than an international banker's should be.

His associates looked on in horror while he loaned money to little, struggling European principalities, rushed to the aid of expiring small-town banks, and committed other rash acts—"for purely sentimental reasons, apparently," they complained. They feared that the great House of Wintermaine, which had stood for centuries as a rock of financial stability, was in danger. These fears became known. In 1934, Gordon Wintermaine got out.

He was a man more interested in human values than in money values. A good man, to him, seemed a better investment than a stock certificate. He hated those bankers' fetishes, collateral and security.

"A good man needs money," he would say. "He ought to be able to get it, even if he doesn't happen to own a house or a barn or a diamond ring . . ."

● He was a social thinker. Articles by him appeared regularly in the popular magazines. He had one dominating idea . . .

"The trend of our modern civilization is towards specialization—more and more. If a man is going to amount to anything, he must be able to *do one thing and do it well.*

"That takes training—years of it . . . And in the meantime—what?

"I know a dozen young men who are talented, energetic, well-trained who have every prospect of success; yet they are unhappy. Why? They don't have any money.

"Their expectancy of earning power is very high. In ten years they will have all they need; in twenty, more than they need. . . But now they worry and skimp and fret in their poverty; and their work suffers, and their souls suffer. Some of them are married, and they have the added distress of seeing their wives worry and skimp and fret. Others want to marry and can't, which is a most injurious condition, as everybody knows . . .

"I truly believe that they are all being permanently injured.

"To get anywhere these days a man's got to be an expert in some line. Well, why not give him a chance? Why make him suffer for it? . . . Suffering never helped anybody."

He plunged into his Personal Mortgage scheme with all his characteristic energy and enthusiasm. John Hand had been one of his first "clients"; and now, as he restlessly paced Wintermaine's waiting room, he remembered his first interview with the great, shaggy, square-jawed man. He could still hear the full, deep voice.

"Hand, I've looked you up. I have ways of finding things out. I know more about you than you do yourself . . . I think you're a good man.

"Now here's what I'm going to do. I'm giving you a regular income. I want you to live comfortably, and in some style—the way you deserve to live, *if you work.*

"Been having a hard time, haven't you? Wife sick—eh? Well, send her to a sanitarium, *now!*

"When your own earnings get up to a certain point—my secretary will give you the figures—the income stops; and you start paying me back, with interest . . . All right?

"If you don't make good progress on your job, the income stops anyway. This isn't charity. It's common sense.

"Also, remember this. If you fall down on your job, you'll be hurting me . . . People are against me. They think I'm crazy. Well, I'm not; but the burden of proof is on me, and on you men that I'm trusting . . . Are you with me?"

A. Rowley Hilliard

John Hand was. He had enough confidence in himself and his future for that. Also, he fairly boiled with indignation when he heard Wintermaine called "usurer" and "mortgager of souls", as he was constantly, from pulpit and press. Gordon Wintermaine did not need a publicity agent. His enemies publicized him.

In spite of the storms of protest, however, people showed an almost frantic willingness to "mortgage their souls." Then began the real work—the picking and choosing. Wintermaine had a tremendous personal fortune, and he planned to use it all; but he didn't mean to throw it away. Consequently, he was the busiest man in the United States before his project had been launched a month.

Knowing this, John Hand spoke directly and to the point—when he was finally admitted to the inner office. He told exactly what had happened that day; he explained all the circumstances; and he finished, "You see, sir, I've been after them for quite a while now, and I'd like to catch them myself." By which he meant: that having put his whole heart and soul into the job for two years, he must finish it if he were to retain one atom of his self-respect.

The older man's brows met in a frown. "You expect to catch them single-handed?" he questioned.

"Yes," said John Hand. "The man who catches the Adjustors will have to work alone; I am sure of that. McQuerdle would bungle it, and the chance would be lost—forever."

"Hmm . . . " Wintermaine leaned back in his chair, and looked quizzically at the other. "Mr. Hand, are you sure you are not chasing a ghost?"

"Ghost!" John Hand was really indignant. "A ghost that has kidnapped eight of the world's wealthiest men in three years? A ghost that has collected a cool eight million dollars in ransom? A ghost that—"

"Hold on a minute!" smiled Wintermaine. "I'm not denying the facts . . . But," he went on very seriously, "is it probable—is it possible—that these eight crimes have been committed by the same hand?"

"I'll admit it seems impossible . . ." began Hand, but the other went on:

"Isn't it more likely that *The Adjustors* is a sort of catchword or trade mark adopted by any enterprising gang that wants to throw the local police off the track? I know a number of experienced criminologists who are of that opinion. They actually scoff at the idea of there being any real *Adjustors*, carrying on their operations all over the world . . .",

"Mr. Wintermaine," John Hand lowered his voice, and glanced involuntarily around the room, "here's a fact that your criminologists don't know. Every man that has been kidnapped by the Adjustors *has been confined in the same house!*"

Gordon Wintermaine shook his head. "That is impossible!"

"It is true! Each one has described it to me separately. I know every room, every stick of furniture, every book, as if I had been a prisoner there myself. It is a four-room apartment. It—"

"But, man alive!" put in Wintermaine excitedly. "It's a physical impossibility. Every man kidnapped has been returned home within twelve hours after payment of the ransom. Isn't that a fact?"

"That's a fact."

"France — South Africa — Japan — Sweden—California!" Gordon Wintermaine barked out the names disgustedly. "Where is this house?"

John Hand merely shook his head, and Wintermaine went on more calmly: "You must be right about the Adjustors. I'll admit that. But the house—no. What they've done is to fix up several places to look the same. I don't see why, but—"

"There are two small scratches on the library table, close together. Inoui Mitsui of Tokio noticed them. Van Cleef Whitney of New York saw them. Whitney told me also of a spot on the bedroom rug. The Crown Prince of Siam explained to me how he made that spot—with a balky fountain pen. I have quite a list of similar details," said John Hand quietly.

CHAPTER II

A Fugitive

● Wintermaine threw himself back in his chair, and exhaled audibly. For a time he said nothing, and his face was a picture of bewilderment. Then: "But, good God, it's a miracle! . . . Don't any of these men have an idea how they got there?"

"They know nothing at all. Here is a typical case. The victim is riding in his car, and smells a strange, sweet odor. He wakes up in the house of the Adjustors. One man went peacefully to sleep in his own bed, and woke up in the place . . .

"It is a richly furnished apartment, with a fine library—very comfortable. There the victim stays until he authorizes payment of the ransom . . ."

"How?" interrupted Wintermaine.

"By telephone."

"What!"

"Yes; he may talk to anyone he wishes. His wife, his lawyer, his business associates, even the police. It is a

bit ludicrous. He is quite comfortable. He is alone, but all his wants are provided for. One man stuck it out for five months—but he finally paid. Now they are not so stubborn. Hardy, the South African diamond man paid up and was back home, all in less than a week. If Capone were alive, he would choke with envy at the beauty of the racket! One million dollars a throw—in gold!"

"Lord!" Gordon Wintermaine shook his shaggy head. After a short silence, he said, "One million dollars in gold would weigh more than a ton, wouldn't it?"

"A ton and a half."

"Well, how—"

"It just disappears."

Wintermaine shrugged. "Yes, of course I have heard that; but there must be some better explanation. Miracles don't happen—at least, we like to believe they don't . . ."

John Hand took his pipe out of his mouth, and looked at it thoughtfully. "It's a good enough name for something you can't understand," he said. "Picture a metal box—or trunk—sitting in a field. The agents of the kidnapped man send a truckload of gold, and fill it up. It's location has been carefully explained to them, by telephone or by radio. That night the trunk disappears. It doesn't matter how many hundred policemen are surrounding the field—or whether the roads are blockaded, or what. It disappears. . . And the next morning the kidnapped man wakes up in his native city, and takes a taxi home."

Gordon Wintermaine was silent for a long time, tapping the polished surface of the desk with his stubby fingertips. Finally he took out his watch and looked at it.

"It is ten minutes of three," he said, and pushed a telephone towards John Hand. "If you were to call up McQuerdle now, you could square yourself with him, couldn't you?"

John Hand looked at him stonily. "Is that what you want me to do?"

"Hell!" Wintermaine's temper flared up. "Am I your master? That's what they say about me. I buy the souls of men with my filthy money. That's rot! . . .

"I pick men whose judgment I can trust—and I don't boss 'em. I have no legal or moral right to boss 'em. But I can still give the advice of a sane man, I hope. Listen!

"If these Adjustors, or whatever they are, can make a ton of gold disappear, they can probably make *you* disappear. If they can make away with the Crown Prince of Siam, they can certainly handle *you*."

John Hand's lean jaw clamped harder on his pipe-stem. "I think I can get 'em," he said.

"You *think!* . . . Well, here's something we both *know*: if you balk McQuerdle, he'll break you—and he'll jail you . . ."

"If he can find me," said John Hand.

Wintermaine shrugged broadly, and suddenly laughed. "All right, all right, Hand! I wouldn't stand in the way of a determination like yours. Do whatever damn' fool thing you want to. As to the money you owe me, it isn't much, is it?"

"I'm nearly paid up. It's three thousand."

"How much has your wife got?"

"Twenty thousand."

"Good! She'll probably need it. I won't dun her. I'll take a risk on you—and a damn' poor risk it is, too!

"And now that you're in this thing for good," he said suddenly, "maybe this will interest you . . ." He took a sheet of paper from a drawer, and pushed it across the desk. ". . . Addressed to me—postmarked Irkutsk, Siberia, if *that's* any help!"

It was typed. John Hand read:

"*You are next—The Adjustors.*"

John Hand was silent for a long time. Then he looked up, and said, "I wouldn't worry very much about this, sir."

"Sure of yourself, aren't you?" Wintermaine smiled.

But John Hand did not explain himself further. This development was a surprise to him; and he wanted time to think it over.

Silently the men shook hands.

● John Hand flew to Cleveland, and paid off the plane. He telephoned the office of Robert Van Sweringen, and learned that the great man had left for his lake-shore home at three o'clock, his wife being sick. It was now four. John Hand telephoned the lake-shore home . . .

"No, Mr. Van Sweringen is not at home. He is at his office in the city . . . What? Mrs. Van Sweringen—? Who is this speaking, please? . . . Oh! Secret Service? No, Mrs. Van Sweringen is not ill. Would you like to speak to . . ."

John Hand hung up; and, leaning against the wall of the booth, cursed softly in three languages. Then he took a cab to the City Engineer's office, and studied a large-scale map of the lake-shore suburbs.

There was much territory to be covered, and he needed help. It was discouraging. Yesterday he could have commanded half the city's police force and no questions asked, but now . . .

He decided to bluff.

At half past four he walked into a police precinct in the northern part of the city, and flashed his gold badge at the Sergeant. "Hand, Government Operative," he said crisply.

"Yes, sir!" said the Sergeant, saluting.

"Colonel Van Sweringen has been kidnapped. He was overpowered in his car near his home, shortly after three o'clock . . ."

The Sergeant gulped. "Whew! Colonel Robert Van—?"

"I will need every man you can muster to search the fields in the lake-shore area."

"The *fields*, sir?"

"Yes. I have reason to believe we will find him there. Now, make it snappy!"

"Yes, sir—yes. But I'll have to call Headquarters. I mean, I don't have the authority . . ." The Sergeant's voice trailed off as he grasped the phone.

John Hand nodded negligently. He was filling his pipe. While he lighted it, he was doing two other things. He was deciding that his unfortunate lateness would necessitate the abandonment of his original plans; and he was watching the Sergeant narrowly through the first billowing clouds of smoke. The latter had said only a few words when he stopped and began listening. All the conversation, it appeared, was coming from the other end. The Sergeant's mouth dropped open slowly, and

then clamped shut with a click as he said "Yes, sir," and hung up. He turned and looked at John Hand queerly.

"Orders to arrest me—eh?" John Hand was thinking that McQuerdle never wasted time—never wasted anything for that matter. A remarkable man . . .

The Sergeant was making ridiculous apologies. "Must be some mistake . . . Orders is orders . . . Have to send you to Headquarters . . . You won't give any trouble, sir?"

"Trouble?" said John Hand, raising his eyebrows. "Why should I?"

The Sergeant had no definite answer for that; and called two officers out of a side room. "Mike," he said, "you and Jerry take the car and take this man down to Headquarters. He won't give any trouble."

"And, in the mean time, what about the good Colonel?" inquired the prisoner.

"They're taking care of that already, sir. All the roads are being watched."

"The police have an unfortunate road-watching fixation," said John Hand.

"Yes, sir," said the Sergeant vaguely.

Outside, it was getting dark. The two officers flanking him held his arms firmly, and marched him towards a small roadster at the curb.

"This looks like the end of a perfect day," he said. "Hold me tight!"

Jocularity, with John Hand, was always a cloak for less pleasant emotions. He was feeling rather grim. McQuerdle, he knew, would show no mercy. There had always been a veiled enmity between them. Now, the kidnapping would succeed, and John Hand would be blamed. McQuerdle wouldn't miss a chance like that. Also, there was insubordination, that unforgivable offence . . . The end of a perfect day! The end of a career, rather!

John Hand stood still suddenly, and knocked the ashes out of his pipe against the palm of his left hand. Anyone who knew him would have scented trouble immediately, because it was not half smoked, and he always smoked that pipe to the bitter end. A glowing coal lodged in his hand, and he said, "Ow!" The two officers had stopped about a foot ahead of him, and they were looking at his hand with concern. He said, "Ow!" again; and then dropped his pipe completely, adding, "Damn!" The two officers now looked at the pipe.

● John Hand was one of those tall, stoop-shouldered men that look frail and aren't. He had American Indian blood in him—a lot of it. He had, in fact, been brought up on an Indian reservation. The sports on an Indian reservation are rough; and John Hand's six and a half feet of loose-knit power was something of a by-word in the Service. The word "handling", as they used it, was a poor pun but it had a very real meaning.

His arms described half-loops behind the two policemen, breaking their grips on his biceps immediately. His hands terminated the loops at their throats, on the outside. His long fingers dug cruelly into the flesh in front, just above their high collars. It was a movement requiring exquisite precision.

The two policemen made odd snoring noises; they wasted no time in drawing revolvers. The one on the right waved his harmlessly, but the other was better situated. John Hand felt a hard muzzle pressing his left side. He stepped back; arched his shoulders; and pulled the two heads together in front of him. They met with an unpleasant crack. A simple shove disposed of them after that.

John Hand snatched up one of their caps, retrieved his pipe, leaped over them, and tumbled into the little roadster. The key was in the switch . . . Who steals police cars? . . . A goggle-eyed citizen, crossing curiously from the opposite sidewalk, saw him drive off in the dusk.

He headed north, the police cap tipped jauntily over one eye. He found the button operating the siren, and made very good time. In ten minutes he saw the silver gleam of Lake Erie, and swung left on the broad shore drive. A little, croaking voice behind the dashboard said accusingly:

"Police Car 718 *stolen by fugitive from justice . . . Headed north from Twelfth Precinct . . . Probably on Shore drive, moving east or west. Car* 723 *proceed up Lincoln Avenue to intercept on east. Car* 742 *proceed up Bond Avenue to intercept on west . . . All other cars in Twelfth District stand by for orders . . ."*

Bond Avenue, if John Hand remembered his map correctly, was just two blocks ahead now. He pushed the throttle down flat, and his siren rent the air. As he whipped past Bond Avenue he saw from the corner of his eye Car 742 approaching, but just a little too late to "intercept on west."

"Wonderful thing, the radio," he chuckled.

The radio said: *"Fugitive in Police Car* 718 *is John Hand, wanted by Federal Government; also wanted for assault on two officers and theft of car . . . Tall—stooped —dark—wearing police cap . . . Men watching city exits in kidnap case prepare to intercept . . ."*

"Humph!" said John Hand. To his right, beyond an iron fence, a large estate lay between him and the lake. In the gathering darkness he could just see the outlines of the Van Sweringen mansion, set among trees on a knoll. He was thinking hard now about another car that must have passed this way, roughly an hour before. He swept by the Van Sweringen driveway, with its ornate pillars . . . The other car hadn't turned in there!

"Fugitive John Hand in Police Car 718 *moving west on Shore Drive at high rate of speed,"* said the radio. *"Car* 742 *following . . ."* John Hand glanced back, and verified that. Two red-tinted lights were there, veering crazily. "—Also at high rate of speed," he chuckled.

"Cars 653 *and* 621 *from Thirteenth District will proceed east to meet him," added the radio wickedly. "Cars* 789, 731, 666, *and* 667 *will close in from the south."*

The fugitive frowned, and began studying the roadside to his right. Trees now, rather thick; the iron fence had given away to a stone wall. He reached up an arm, and adjusted the spotlight to shine along that wall Far ahead, among the white lights of city-bound cars he saw red ones weaving. The wailing of many sirens made the night hideous.

Suddenly he caught the flash of a white, barred gate in the wall. Stamping on the brake pedal, he pulled at the wheel. Only the little car's lead weighting kept it upright, as it swerved from the road and splintered its way through the gate. A hiss and a bang sounded the doom of a front tire; the steering wheel wrenched loose from John Hand's grasp; and only his right foot, caught between the clutch pedal and the steering post, held him in

the car, as it struck a tree, skidded in a violent arc, and stopped.

Cursing at an ominous twinge in his right ankle, he clambered to the ground, and struck north through the trees. If he could reach the lake, he thought, he might yet escape. He was a good swimmer, and there would surely be boats within reach. As he remembered the map, there was about a half mile of wooded parkland and fields between the road and the lake at this point. It was part of the territory he had wanted searched.

"Well, it'll be searched now!" he chuckled, not without satisfaction. Behind, he heard the throb of many motors, mingled with horn-tooting and shouts. Beams of white light slashed among the trees. He was limping now, and when he tried to quicken his pace, he suffered his first misgivings. The ankle was bad.

There was open ground ahead. He judged it to be a field of some size, but couldn't be sure because the night was black. There was no moon. The Adjustors always worked in the dark of the moon, he remembered.

CHAPTER III

Imprisoned

● A car was coming through the woods—perhaps several. The shortest way to the lake must be his way, he decided; and headed across the field. It had been plowed last spring, and now the furrows were hard and treacherous. His ankle felt like a tight blob of flesh spliced to his foot with red-hot rivets. He couldn't get much further on his feet, he realized.

Suddenly, light bathed the ground around, and he threw himself flat. Fifty feet ahead he saw a small clump of bush. The light swung away. He crawled into the bushes, and sat up, propping his back against a smooth, rounded rock. Three cars came out of the woods. One of them bumped around the edge of the field to the farther side. Came voices and the banging of doors.

John Hand shrugged philosophically, and packed his pipe. He scratched a match on the smooth rock, and, as it flared, there came a dull ringing sound. Ignoring the agony of his ankle, he leaped to his feet, and stared down at the thing. It was not rock; it was metal!

"Well I'll be—!" He doused the match, praying it had not been seen. Carefully he felt over the glassy-smooth surface of the thing on the ground. It was a cylinder, pointed at the ends something like a torpedo, and about eight feet long. On top were two little posts, with a fine wire strung between. Searching further, he found a small, cup-like depression in the side, with a metal handle sunk in it. Without hesitation, he twisted the handle, felt the soft sliding of a bolt, and pulled. The close-fitting door—almost an entire side of the thing—swung out slowly and quietly on its well-oiled hinges. John Hand heard a faint, steady hiss, and then another sound—the regular breathing of a man. He flashed his pocket light inside.

Robert Van Sweringen was suspended in the center of the cylinder, held by straps which were attached to the ends of springs extending from the inner surface. He was asleep, as his slow, long breathing showed. "Lo! The Colonel!" said John Hand.

An exploring light-beam caught the bushes, and held. John Hand froze, concentrating on the voices, which carried far in the night.

". . . Nothing there, sir . . ."

"How the hell do you know there's nothing there? Have a look."

The light swung away, but little ones were bobbing along the ground now. John Hand unstrapped the Colonel, lifted him out upon the ground, and rolled him away from the bushes on the side opposite the approaching lights. Unable to resist the temptation of the high, starched collar, he took his pencil and hastily scribbled upon it: "To Andrew McQuerdle—With love—J. H."

Returning to the cylinder, he removed his gun from his armpit, laid it inside, and crawled in after it. Laboriously he strapped himself in position among the springs; then reached out and pulled shut the heavy door. He shot the bolt; and, to his delight, found a small catch which held it in position.

"They'll need a can-opener to get me out now!" he chuckled. "And perhaps before they find one, something else will happen."

The darkness was complete. He fumbled for his lamp. That soft, steady hissing sound puzzled him. The place was stuffy, and he felt suddenly frightened about air. The door was rubber-sealed. Even before his lamp revealed the little tank, however, he had guessed that the hiss must be an oxygen valve. A queer sieve-like arrangement near his feet must hold a lime solution for absorbing carbon dioxide, he imagined. There was nothing else to see, and he switched off the light. His ankle throbbed rhythmically.

Occasionally he glanced at the green glow of his wristwatch. A half hour passed, and still nothing happened—no sound came. He was surprised, but thought he could understand. They had tramped through the bushes, peering perfunctorily; then they had found the Colonel, and forgotten all about the bushes.

He was reasonably comfortable. He had plenty to think about; and the darkness did not worry him—nor did the loneliness. The oxygen made him a little lightheaded. He felt quite pleased with himself. He rested. Necessity had taught John Hand to take his rest where he found it.

A moment after he had noted the hour of eleven by his watch, there came a deafening, nerve-shaking clang on the wall of his prison. Startled, he found himself shaking up and down between his supporting springs, so violently that his teeth chattered. It did not last, however, and soon he was quiet again. He resisted an impulse to open the door. Something hard was pressing into the small of his back; and, hunching up one shoulder, he managed to reach it with his hand. It was his revolver.

● At first he thought that the cylinder must have rolled over; but the weight of his arms and his general sense of equilibruim told him that that could not be the case. Why, then, was his revolver not lying properly on the floor a foot below his back? He released it, and heard it strike the cylinder. His flashlight showed him where it was, stuck again the top, above his head. He frowned at it irritably, and pushed it away from his face. No telling what it might do next. With knit brows, he puzzled over the matter until nearly midnight, when he began to feel cold.

The wall of the cylinder, when he touched it, felt like

dry ice. Here was something new to puzzle about. October nights do not get as cold as all that. John Hand began to feel annoyed.

"No wonder they give 'em gas!" he snorted. He wanted to smoke, but knew he couldn't. His synthetic atmosphere was too nicely gauged for that. Again he had the impulse to open the door, but resisted it. He compromised with himself by unfastening the catch which held the bolt. If anybody wanted to take him out now, he was quite willing.

His flashlight had now joined his revolver at the top of the cylinder, and he even felt his wrist-watch tugging in that direction. His arms, head, and feet felt light. His ankle, which had suffered greatly by the unsupported weight of his foot, seemed relieved. At last, his right arm surrendered to the upward pull of the little watch, and hung lazily above him.

Further speculation on this matter was interrupted, however, by another disturbance from outside. He clapped his hands over his ears and grimaced at the deafening clamor, as something again struck the walls of his prison. Once more he was shaking in the springs. The bumping, clanging, and shaking continued for some minutes; and then, suddenly, all was quiet. His revolver fell from the roof, striking him a sharp blow in the stomach. His flashlight bounced from his hip, and broke against the metal wall. Filled with a sudden premonition, he reached for the door handle.

It was turning!

He grasped his revolver, and pointed it. Light streamed in, and he felt a rush of warm air. He found himself staring directly into the face of a man. John Hand thought it was a surprised face, with its wide eyes and open mouth; but he couldn't be sure as to its expression, because it was upside down. Beyond it, he caught a glimpse of bare walls and floor. What supported the face he could not see.

For a long moment he stared into the inverted face, stupidly pointing his gun at it. Then, noiselessly, it was removed from view—upwards. He heard the soft closing of a door, somewhere in the room. Then complete silence.

He began unfastening the straps which held him. The time had come, he felt, for action. Obviously, his cylinder had been moved—where and why he must discover . . .

A heavy, sweetish smell came to his nostrils, and he sniffed the air suspiciously. Then he renewed his struggle with the straps, trying not to breathe. The buckles were stubborn, and his fingers were numb. The numbness was not due to cold. Swiftly, it spread up his arms and into his body, making him sick and dizzy. Too late, he thought of closing the door. He grasped its handle, but could not move it. It was as heavy as all the world. He was free of the straps now. As he tugged at the door, he seemed to be floating in the air—floating right out of the cylinder. He knew he must be dreaming. Darkness came; and he floated in it, rolling over and over and over, sickeningly, helplessly . . .

He next saw the light in a room he knew, from a bed he knew. His head ached a little. He stirred uneasily, and looked around. He rolled over stiffly, and gazed down at the little ink spot on the heavy Persian rug near the bedpost. Yes, this was the bedroom in the house of the Adjustors.

His ankle was neatly bandaged and splinted; he knew that, even before he threw back the covers and saw it. His clothes had been taken from him, and he was dressed in the close-fitting grey garment which was worn by every captive of the Adjustors, and which could never be taken off. It covered the legs to the ankles and the arms to the wrists, and came high around the neck; it was secured with the metal fastenings called zippers, so arranged that they could not be unfastened by the wearer. Victims had complained to John Hand that they never got a bath; but they had to admit, at the same time, that they didn't need one. No speck of dust had ever been seen in the house of the Adjustors. It was the cleanest place in the experience of any man who had been there. There were no windows. Perhaps that was the explanation, but it didn't entirely satisfy John Hand.

Curiosity was his first emotion. He hopped through the rooms, inspecting them—the living room, the library, the other bedroom. Everything was neat, orderly, and in good taste—almost oppressively so. The silence of the place was so complete that the noises he made startled him. He tried to move quietly, but that was almost impossible on one foot. He had an unreasonable fear that someone might hear him.

● He argued with himself, annoyed. Why shouldn't someone hear him? *They* knew he was there, didn't they? It was no secret to *them*. Nothing he could do would make any difference.

Far from cheering him up, that thought depressed him more. John Hand was not accustomed to feeling helpless. It made him uneasy—jumpy. He realized that he was turning his head constantly, suddenly staring over one shoulder or the other, as if wanting to see in all directions at once. Also, he would stand for long periods of time perfectly still, listening—straining his ears in the silence—hearing nothing.

He sat down, tense and shaking, on the edge of a chair. There was something queer about the place. He had sensed it in the descriptions of the men who had preceded him here. He sensed it now; but it was too subtle—too intangible—for comprehension. Everything seemed so correct and ordinary, yet there was something *wrong*. He knew it. He sat there, struggling to put the feeling into a concrete thought.

As a boy, he had known fear of the dark. Every normal boy has felt it: that sudden, panic-stricken consciousness of an alien *Presence*—an all-encompassing, evil *Thing*, which cannot be seen or heard or touched, but which is still very real and terrible.

But John Hand had not been a boy for more than twenty years. Furthermore, it was not dark here; globes in the ceiling spread a soft natural radiance over everything. Yet he was afraid.

Not of the Adjustors. True, they had every reason to hate him. He had cost them a million dollars, and he was a very definite menace to their safety. True, he was entirely in their power. Still, they were men; and John Hand could deal with men. He had come into this thing with his eyes open. He had gambled on the chance of their sparing him long enough for him to penetrate their secrets. He had felt confident that, once here, he could solve the problem of their mysterious hide-out and their mysterious powers.

"Give me six hours in that place," he had said confidently to his wife, "and I'll give you the answer . . ."

Yes, the mystery was here; but he was not solving it. Instead, he was surrendering to it, and shaking with fear like a nervous woman! He clenched his fists and knit his brows, striving to think—striving a second time to give concreteness to his shadowy impressions.

Anybody who could have read his thoughts, then, would have called him a lunatic. It seemed to him that these four rooms, with their quite ordinary furniture and decoration, were not real at all—that they were merely screens put there to hide some terrible reality which lay behind. The studied Naturalness of everything he saw was a cloak covering the awful Unnaturalness beneath. Each table, chair, vase, and book was part of the deception . . . And it was a clever deception, careful and painstaking.

A less impressionable man than John Hand—or an unsuspicious man—might have noticed nothing. But John Hand knew that the whole thing was *wrong*. How that knowledge came to him, or what was meant by it, he could not say. In fact, for whole minutes at a time, he feared he was mad. But then he remembered that others before him had had the feeling.

He was not a man to surrender to panic fear. Fear remained, but he battled it constantly with his reason. No deception is perfect, he told himself. There must be flaws in this one, and sooner or later he would find them. The very fact that he sensed something wrong proved there were flaws. His subconscious mind—or instinct—perceived them, while his reason did not. He had run across that phenomenon many times in his detective work. And he knew what to do.

Watch for details. Never let one little unexplained fact get past you. It might be a clue. Forget nothing, until it has been well explained and accounted for; and then put it out of your mind completely, so that it won't be in the way. Treasure all your little unexplained facts. Work on them; try to fit them together; and be on the alert for similarities among them. That was John Hand's inductive method.

Whether or not *They* would give him time to use it was another question, he realized.

He began examining the one-piece, tight-fitting garment which he wore. He could not decide what the material was. It might be wool, but it seemed very stiff—stiffer than any cloth he knew. He scratched it with his fingernail—there was nothing else to use—and it seemed almost hard. He made a little shiny place, scratching. He hobbled into the bedroom, and examined the bedclothes. They were the same.

He returned to the living room; and examined his breakfast, which he had ignored hitherto. It was kept hot by a little electric steamer. He switched off the current. The food was in a bowl—unpleasant-looking stuff, of the consistency of gruel or porridge. The Adjustors always served food in this form, he knew. The ingredients might vary, but the form and manner of serving was always the same. He tried it gingerly, and found it extremely good, with the taste of bacon predominating. He was not hungry, however.

CHAPTER IV

At Bay

● The calendar clock, set in the wall, told him it was ten-thirty, A.M., October 24. He wanted to smoke. They had not left him his pipe or tobacco, and that irritated him. He didn't want to smoke out of their damned tube! Still, any smoke is better than no smoke at all; and he went to the wall, where two flexible tubes hung down from a metal panel. He knew all about them, of course. One supplied drinking water; the other, tobacco smoke. You signify your wishes for one or the other by pressing signal buttons. There was a supply of changeable mouthpieces in a box. He was glad of the opportunity of inspecting these queer arrangements at first hand. He didn't like the tobacco.

He moved over to the telephone, and idly picked up the receiver. He was about to replace it, when:

"Yes?" said a quiet voice.

John Hand was a bit taken back.

"You wanted something?" insisted the voice.

John Hand said the first trivial thing that came to his mind. "I don't like Turkish tobacco."

"What tobacco do you prefer?"

"Virginia and Perique; half and half." John Hand grinned suddenly. This was really funny, he thought.

"It will be attended to," the voice assured him. There came a click.

He replaced his own receiver, feeling a trifle dazed. So he was to be treated like a paying guest! How long?

During the remainder of that day and the whole of the following day, he carried on a minute inspection of the four rooms. He did not sleep, but he ate quite heartily. The food was undoubtedly good. He could recognize various meat and vegetable flavors. There was, however, one flavor running through it all that was new to him. He could make nothing of it. The food came to him by way of a cupboard in the living-room wall. It had a sliding panel which raised with a buzzing sound at meal times. When he had finished with his dishes he replaced them, and the panel closed.

Air was supplied through small, grated vents in the ceilings. That sweetish gas of theirs could also be supplied at a moment's notice, he thought grimly. The knowledge of his complete helplessness did not induce a feeling of resignation in him, as it might have in many men. It increased his restlessness. He was a storehouse of nervous energy. The thought of sleep was abhorrent to him. He pursued his investigations doggedly, even when they seemed to be leading nowhere.

He examined the books in the library. There was a fine variety of them—many that he would have liked to read under different circumstances. What interested him now, however, was the fact that they were uniformly bound, with thick, heavy covers.

He examined all the decorative vases, and the bowls from which he ate. They all had one characteristic in common: thick bottoms, out of proportion with their other parts. He wondered if he dared break one of them. He might discover something that way.

He was puzzled to know whether he was being watched. He had found nothing to indicate that he was; but it seemed unlikely that they would neglect that precaution.

He tried to simulate a certain casualness while pursuing his investigations, so that an occasional watcher would not be made suspicious.

One form of relaxation he did take, more in an attempt to lull their suspicions than for any other reason. In the library, he found a chess set. Pasted on the back of the board was a short typewritten notice:

"You may play by telephone if you wish. There is a good player at your service."

He set up the men; and played a game with the Quiet Voice at the other end of the wire, getting rather badly beaten. He was proud of his chess game, and excused himself on the grounds of nervousness.

When the third day came and he had discovered nothing of tangible value, his spirits began to fall. His confidence in himself was shaken. Truly, these were the perfect criminals! They could hold him a week or a year; it made no difference, apparently.

He felt suddenly very small and very unimportant. He was a weak little pawn in their big, expert game. He had come to "get" them, and they had treated him with contemptuous politeness . . . He had cost them a million dollars; and they blended his tobacco for him, and played games with him! The thought made him flush hotly.

● Yes, these were super-criminals. They were in no hurry, because they had no fear of discovery. That must be the secret of it, thought John Hand. From long experience he knew that a criminal's greatest weakness is his hurry. His fear of discovery is the crack in his armor. Remove that, and you have given him a new and terrible strength.

They wouldn't let him go. Why should they? It was safest for them just to keep him here, where he couldn't do any harm. Now there rose before his mind's eye pictures of his home and of his wife's face—anxious and a little frightened, as he had last seen it. Mentally he could hear her voice, telling him to be careful, as she always did. That had sometimes irritated him, he remembered with astonishment. He had thought it unnecessary and superfluous! He conceived a new horror of his prison.

But he was not a weak man. Shortly after noon that day, he seated himself in a chair in the living-room, and attacked his problem with a new energy—an energy born of desperation. He must get to the bottom of the matter soon, or admit defeat.

At three o'clock he had not moved. Slumped deep in his chair, with knit brows and blank gaze, he still struggled with the mystery . . . At four, his lower jaw was outthrust, and his breathing was harder . . . At five, the faint suggestion of a smile appeared about his mouth . . . And, a few minutes before six, he leaped to his feet, chuckling, with the light of triumph in his eyes.

He went quickly to the library; and taking a book at random from a shelf, tore out half a page. He crumpled the paper in his hand, and rolled it up into a little ball. He held it out in front of him, and then let go of it. He smiled at it sardonically.

The little ball of paper floated before his face. John Hand chuckled at it delightedly. Caught in an air current, it circled towards the ceiling. He reached up and grasped it, and hid it in a book.

He gazed around him with newly seeing eyes. Understanding swept over him like a fresh, clean wave. The Mystery was a mystery no longer. And Fear was gone.

John Hand went into his bedroom, and closed the door. He was virtually certain that they could not watch him in here. He had examined the walls with the minutest care, and had found nothing resembling a peep-hole.

After an hour's struggle he found how he could open the slide fasteners of the garment they had put upon him. He was excited. He had read a great deal of science fiction, which was the most popular literary form of the day. In hundreds of stories that he had read the characters found themselves in positions where the Earth's gravitational force did not exist; and it had always seemed to John Hand that they took it too calmly. They floated around in the air without seeming to be even interested in the phenomenom. The science fiction authors seemed to think that the sensation would be annoying; they emphasized its discomforts. John Hand thought it would be fun. But he had never hoped for the chance to find out. Now, therefore, he was pleasurably excited.

As he peeled off the garment, he felt as though he were expanding. He stood up, with the garment still about his legs. He felt a foot taller. His arms floated lightly. They had a tendency to fly up above his head; a natural muscular reaction, he thought. He squatted down, and took off his shoes. They probably had metal insertion also, he thought. He dragged the garment from one leg, and then from the other. As he held it in his hands, he rolled over forwards. He dropped it, and pushed against the floor with his hands. In a moment, he was floating in the air. The floor sank away from him slowly.

Instinctively he tried to right himself, to grasp at something. There was nothing he could touch; and for a moment he struggled, beating the air with his arms and legs in foolish panic. Then his good sense came to his aid. He grinned and relaxed. He stretched out luxuriously; a thrilling sensation of restfulness and comfort suffused his whole body. He watched the ceiling coming slowly down to him. Now, this was something like it!

There was none of the bodily discomfort or pain which some of the authors had imagined. Why should there be? The human body is made to withstand gravitational strain from any direction. A man is comfortable standing up, or lying on his back, or on his stomach, or on either side. He suffers no agony standing on his head. When he rolls over in bed, more than a hundred pounds of gravitational pull changes directions in his body; and it doesn't hurt him. Why, then, should the *removal* of the pull cause discomfort? John Hand found that it didn't, and he was childishly pleased at this vindication of his own judgment.

● What did surprise him, however, was the wonderful restfulness he felt. It seemed as though every muscle in his body was crying out in thankfulness at this new release from strain. This must be as good as sleep, he thought. Or better. New strength seemed to flow through his veins. He breathed deeply, and flexed his muscles, with a shiver of pure delight.

He kicked the ceiling, and sailed towards the floor again. He was turning slowly now, over and over. That was a bit annoying, because the room spun around him. He closed his eyes, and felt better immediately. The sec-

ret of the thing, he thought, was to be non-resisting. You were helpless, of course; but what did that matter?

Perhaps, though, a man could learn to handle himself pretty well. He resolved to practice that. He made his way to one wall; and then sailed back and forth across the room, diving swiftly.

"Sport of the Gods!" he chuckled. The phrase pleased him and kept runnning through his mind. He forgot everything else for an hour. Finally, he struggled back into the garment.

From that time on he was a new man. The chief secret of the Adjustors was this. At last, he had something on them. One success breeds others. He began to think about escape.

On the following morning, however, he got a shock. Happening to wander into the second bedroom, he found a man in the bed. There was something familiar about the big, shaggy head on the pillow. Astounded, he recognized Gordon Wintermaine.

Gordon Wintermaine was unconscious. John Hand knew that there was nothing to do but wait for the effects of the sweetish gas to wear off. He could not help feeling surprised. And yet, what was surprising about it? There was nothing to prevent the Adjustors from continuing their operations as they had warned Wintermaine. They weren't afraid of *him*. There was no reason why they shouldn't . . .

Wait! . . . Yes, there *was* a reason why they shouldn't!

John Hand smiled in triumph. They had underrated him! Well, let them continue to do so! He would take care not to enlighten them. He would have to be very careful.

Gordon Wintermaine groaned, and stirred on the bed. Slowly, his eyes opened, and took in John Hand. He stared dully for a time. When a man wakes naturally, he is never really surprised at anything he sees. The mind has a way of adjusting itself, slowly and without shock, under those conditions.

"Hello, Hand!" said Gordon Wintermaine.

"Hello, Mr. Wintermaine. How do you feel?"

"Rotten," decided Wintermaine after a moment's consideration. He dragged himself to a sitting position. "What the hell's this?" He fingered the grey garment he wore, disgustedly.

"That's your uniform—as a guest of the Adjustors," Hand told him lightly.

"Humph!" Wintermaine frowned around the room. Then he looked at John Hand again, with a sudden glint in his eyes. "What are you doing here?"

"Not guilty!" said Hand. The relief he felt at having a companion was showing itself in levity. "I came in place of Van Sweringen. Now that they've got me, they don't seem to want to let me go."

"Oh!" Wintermaine nodded. "I wondered what happened to you."

"How did they get you?" asked Hand.

Wintermaine ran a hand through his hair. "I remember leaving the office last night. My chauffeur drove me up to White Plains as usual . . . At least, I thought it was my chauffeur. Perhaps it wasn't, though. Just before we reached home I smelled something sweet . . . The rest is a blank."

After a short silence, John Hand said thoughtfully, "It's strange. I wouldn't have expected it."

"Why?"

"I didn't think they'd ever take you. They've taken a lot of rich men; but—just between you and me—they've never taken a really useful one before . . . You're not a typical victim."

Wintermaine smiled wryly. "Maybe they don't share your opinion of my usefulness."

Hand spoke awkwardly. "I'm sorry if I put you off your guard—very sorry!"

"Oh, shut up! It's not your fault." Wintermaine swung his feet to the floor. "Do they feed you here? I could eat."

John Hand led him into the living room. The cupboard was open, and contained two bowls now. Hand moved them to a table.

"Pah!" Wintermaine was glaring at the stuff.

"Not so bad as it looks," Hand told him cheerfully. The other agreed with him, after trying the food. But he soon lost interest in eating. He looked around the room curiously.

"Where on earth are we?"

"Nowhere," said John Hand.

"Eh?"

Hand lowered his voice to the faintest of whispers. "We are not on Earth," he said.

Wintermaine groaned at him. "I've got a headache," he objected. "I wish you'd save your jokes till later!"

"I have a lot to tell you, Mr. Wintermaine," breathed John Hand. He glanced around the room significantly. "But we've got to be careful. Wait a while." Then, in his normal voice, he said, "Come. I'll show you around the place."

He did. Wintermaine snorted disgustedly at the drinking and smoking arrangements.

"This is a nut-house. I'm going to pay up, and get out."

"Good," said Hand.

"Maybe I could ransom you too."

"I doubt it."

Later they were in Hand's bedroom, with the door closed. Hand had brought his little ball of wadded paper from the library. He tossed it in the air. Together they watched it. It floated about, finally coming to rest in a corner of the ceiling.

Wintermaine turned a puzzled face to Hand. "What the hell . . . ?"

"I have discovered something," Hand told him. "When I said we were not on Earth, I meant it. There is no gravitational force here. Last night I floated around this room like a bird—or an angel. I took this off." He touched his garment. "There's metal in the weave . . ."

"You mean—magnets?"

"Electromagnets," John Hand pointed to the polished hardwood floor. "Underneath."

CHAPTER V

A Desperate Chance

Wintermaine looked around the room. "Lord! You'd never guess it . . . I mean, *I* never would have," he corrected himself, smiling. "Are you sure? It's a wonderful deception. How about the food, for instance?"

"Their best trick of all. It must have been their hardest problem. They've managed somehow to mix in a metallic substance. A chemical triumph, I'd call it . . . They couldn't manage with the water, though—or tobacco . . . Those tubes are clumsy."

Wintermaine was shaking his head slowly. "It's too much for me. It sounds like science fiction . . . You say we're off the Earth. Where are we—on the moon?"

John Hand smiled. "Not that far, I hope. Besides, the gravity—"

"Sure. I get you. We're not on the moon . . . Still, we'd have to be a long ways from the Earth to lose all gravity effect, wouldn't we?"

"Not necessarily. Suppose, for instance, we were revolving around the Earth. That would create a centrifugal force opposing gravity. We might be quite near the Earth."

"How near?"

"Well, that would depend on how fast we were revolving. The nearer we are, the faster we must move."

"Oh, hell!" burst out Gordon Wintermaine. "This *is* science fiction! I don't like it. You're crazy, and you're trying your best to drive me crazy! . . . If this place is off the Earth, for instance, how did they bring me here?"

"You came in a sealed cylinder—lifted by an electromagnet and cables, perhaps . . ."

" . . . On the end of a rope, I suppose!" In his earnestness Wintermaine was almost sneering.

"Possibly."

"*Im*possibly!"

"There's no harm in theorizing," said John Hand defensively.

"Sorry!" said Wintermaine quickly. "Go ahead."

"Suppose," said Hand slowly, "that this thing we're in—whatever it is—"

"Call it a ship."

"All right. Suppose that this *ship* is revolving around the Earth at the same speed the Earth is spinning. Then it could stay right above the same spot on the Earth as long as it wanted to, in a state of natural suspension. Now, if it had propulsion tubes . . ."

"What do you mean?"

"Tubes that could release expanding gasses . . . If it had those, it could move about at will; nearer the Earth, or farther from it—or around it, forward or backward."

"Without anybody seeing it?"

"Certainly! It is outside the atmosphere. It is small. It might be painted grey, or black . . ."

"Power? . . . Air? . . . Water? . . . Gas for the propulsion tubes? . . . And what about communication?" interjected the older man.

John Hand drew a long breath. "Well, power would be easy, it seems to me. The ship, being outside the atmosphere, would be boiling hot on the sun-side and freezing on the other. A simple thermocouple would give you all the electric power you wanted. You could have batteries for storing it; so you could go out of the sun any time . . . As for air and water—you bring them up from the Earth's atmosphere by supply rockets. You could have a radio aerial, too; and talk to people on Earth by short-waves . . . Also, when you've got water and plenty of electric power, it's no trouble to get explosive gases. Oxygen and hydrogen—by electrolysis."

"Lord!" Wintermaine was visibly impressed. "You've got it worked out, haven't you? . . . Just the same, it's still fiction. It might make sense from the science angle, but it never would from the business angle. The thing would cost too much."

John Hand nodded unhappily. "Yes," he agreed, "it certainly would!" He wrestled with that problem in silence for a time. Then: "Still, you might look at it this way:—the ship has the whole world at its mercy, so to speak. In time—"

"Rats!" snapped Wintermaine. "No man could ever get his money out of it in his lifetime; and he certainly wouldn't build the thing for the sake of his descendants!"

John Hand had to agree to that.

"But, look here!" went on Gordon Wintermaine briskly. "I'm making a fool of myself arguing with you like this. You've got a theory—and that's more than I've got! I'll tell you what I'll do. When I get back home (or back to Earth, if you like!) I'll pass the tip to every observatory in the world. If the astronomers can't find you, then you're not in the sky; and we'll have to hunt somewhere else! Maybe one of 'em has caught a glimpse of the ship already, without suspecting what it was . . . Oh, rats!" he finished with a laugh. "It's science fiction!"

They let it go at that.

● John Hand had not given up his plan to try to escape from the apartment; but he said nothing about it to the other. That afternoon, they played three very enjoyable games of chess. Gordon Wintermaine spoke to the Quiet Voice on the telephone; blasphemously authorizing payment of a million in gold for his ransom. At dinnertime, unseen by the other, John Hand placed a chessman under the sliding panel of the food cupboard. Saying that he was tired—the truth—he went to bed at eight. For the first time during his captivity he slept. But at two-thirty he was creeping silently out of his room.

His ankle was, by this time, quite serviceable. He listened outside the other bedroom until he heard Wintermaine's heavy regular breathing. He crept into the living room.

The chessman was wedged under the sliding panel. He pushed his fingers into the crack it made, and raised the panel noiselessly. He did not yet know whether he could get his long body into that cupboard, but he meant to try. He succeeded.

The necessary posture was back-breaking. He considered what his next move should be. He had no idea of getting through the adventure unseen. In fact, his first plan had been to secret himself there until breakfast time, and grapple with the waiter when that functionary should appear. He wanted information, and he didn't much care how he got it. That was his attitude.

But now he reconsidered. He couldn't stay bent up like this until morning. Should he go to bed, and come back later? Or should he try to go farther now, unaided by the waiter?

No harm in trying, he thought. He felt around the edge of the inner wall of the cupboard. There was a crack. It must be another panel, he thought. He managed to get his fingernails under it; but it wouldn't move.

He was balked. There was nothing remotely resembling a tool in the four rooms. There wouldn't be, of course. He started to crawl out of the cupboard. Then he had an idea.

This cupboard had two sliding panels, opposite each other. When one was open, the other must be closed. Perhaps the arrangement was automatic . . . Slowly he lowered the panel through which he had come. When it was nearly to the bottom, he heard a click. Now he tried the other, and it came up easily. He closed the other one all the way.

He was looking into the strangest corridor he had ever seen. It was about twenty feet long. But it was twice as deep. The floor of it was twenty feet below him. In the ceiling, the same distance above, soft lights burned. It was narrow; and its walls were like cliffs, facing each other—cliffs with doorways in them like gulls nests, all up and down the surface.

For a minute he was completely bewildered. Then he saw the reason for it. The inhabitants of this place did not use gravity. The artificial gravity of the prisoners' apartment was not for them. They flew and floated. Staircases were superfluous. Now he saw projections all over the walls which must be handholds.

With a slight grimace, he launched himself into the corridor, floating horizontally. He checked his flight at the first doorway, scratching and grabbing at the wall; and peered through it. The room was a kitchen, he saw instantly. No one was in it. He was glad of that.

He reflected. If he went batting around at random, he was sure to run into someone soon; and then his flight would be rudely checked. What he wanted to do was to get to the outside of this structure.

With this idea in mind, he plunged downwards towards a doorway at the bottom of the corridor on the end. Sailing warily through this aperture, he found himself among machinery. The room was full of it: levers, dials, gauges, and switches. No one was in this room either. He was surprised at that. Didn't they tend their machinery? The whole place had a deserted aspect, for that matter. It was silent as a tomb. If they were going to let him alone like this, thought John Hand, he might discover a great deal.

Then he saw the window. It had a bluish gleam. The blood of mounting excitement throbbed in his temples. He made his way to the window.

"Good God!"

The exclamation was wrung from his lips by what he saw. Before him lay a great, deep sea of beautiful, diaphanous blue! Behind this opalescent curtain he could see dimly shapes which were familiar to him. There was a long, wavering, indented line—light on one side, dark on the other. There were other lines, the courses of which he had known from boyhood . . . An outline map! The Great Lakes! The Atlantic coastline!

A thrill of mingled triumph and awe shook his very soul. He had been right! Right! . . . But, oh God, what a difference between the theory and the actuality! The immensity of the spectacle left him weak and sick. He muttered and babbled to himself brokenly . . . So far away! What was *he*—so far away from the good Earth? He trembled. With that awesome emptiness between, could he still be a living, breathing man? Or was he dreaming? Or was he dead?

● The absurdity of the last idea helped him to conquer his fit of terror. He came out of it, laughing weakly. He was thinking, now, what a feeble creature he had turned out to be when it came to real scientific adventure. A real science fiction hero would have glanced casually out of that window, taking stock of his position without batting an eye. Probably he would have been quite bored because the Earth was so near. He would have longed for the far reaches of the outer moon of Jupiter—or some place like that, where a man could get a thrill. Above all, he would have been practical in his attitude—not emotional. John Hand resolved firmly to emulate the science fiction hero, even if it killed him. He looked out of the window again.

This time—benefitted by his new attitude—he saw a thing that was of more immediate interest than the Earth—and much closer. It was attached to the ship. It was a huge windlass—or winding drum; and from it there extended towards the Earth a great, shining cable. He followed the cable with his eye—farther and farther into the blue, until it was lost there. The drum was unwound.

Suddenly he was startled by a sound somewhere in the ship behind him. With clumsy haste, he turned himself around and pushed away from the window. He found that he was floating swiftly towards a row of levers. He stretched out an arm to check his flight. His hand slipped on a smooth metal surface, and his whole forearm plunged down among the levers. Immediately, the entire room seemed to lurch sidewise. The opposite wall rushed towards him. and struck him a stunning blow. He grasped blindly with both hands for something to steady him.

"You fool! What have you done?"

The voice was harsh, but it had a familiar ring. He managed to turn himself. Gordon Wintermaine was in the doorway, glaring at him, his face very flushed. John Hand stared at him stupidly for a moment. Then his nostrils flared out . . .

He snapped: "How did you get down here. Wintermaine?"

Wintermaine's eyes wavered for a split second. Then: "I found the door unlocked. The door in the living room."

"You did *not!*" John Hand's voice crackled. His face was very pale. Little knots of muscle stood out at the base of his jaw.

Wintermaine came into the room, making for the row of levers. John Hand moved to intercept him, his hands bent like claws.

"Let me alone, you fool!" Wintermaine's voice was a hiss.

Suddenly, the room lurched again—downwards this time. The ceiling came down and struck both men heavily. They heard a harsh squeal of rending metal. Wintermaine screamed, and floated towards the window, mouth wide open, his face now ashy pale. John Hand, at last gaining control over his wallowing body. followed close.

Wintermaine turned from the window, with a mad shout: *"It's gone!"*

Stunned by the man's vehemence, John Hand gasped dully. Wintermaine went on yelling in breathless staccato:

"You moved the ship! . . . The cable was out . . . The cable caught! . . . The cable is gone! Damn you—it's gone!"

John Hand understood at last. Now he could see through the window. The drum of the windlass was naked. No cable stretched away from it. The Earth

swung crazily around beyond, amid a black, star-studded sky.

Now Gordon Wintermaine was at the levers, jerking them desperately, staring into the faces of dials and gauges. The room leaped wildly around them.

Wintermaine finished with the levers. The room quieted—became motionless. Wintermaine turned, and faced John Hand. The two men stared at each other. Both were deathly pale. They stared into each others' eyes; and the eyes of both glittered strangely. In the little metal room was the silence of death.

Then Wintermaine started speaking. His voice was a lifeless whisper.

"We are alone here, John Hand . . . All my men have returned to Earth. They returned last night—by the cable . . . The cable is gone, now . . . We are alone here, John Hand, you and I . . . And the circumstances are such that—*only one of us can ever return!*"

Then John Hand knew that the time had come when he must fight for his life. He was quite calm about it. Carefully, he put both feet against the wall behind him, with his knees bent. Deliberately, he lunged. Wintermaine watched him, and smiled coldly.

Too late, John Hand saw his mistake. He was floating straight at the other, helplessly. He had no way to stop. Wintermaine was gripping the edge of a shelf with his hands. He raised both feet, and bent his knees. John Hand folded his arms over his head, trying to protect it. When he was close enough, Wintermaine kicked out cruelly. The shock sent streaks of fire through John Hand's head, and flung him back across the room. Through a mist of pain he saw Wintermaine passing through the doorway. He heard the resonant clang of the metal door. He fought his way towards the door.

CHAPTER VI

Into the Space Coffin

● As he reached it. he heard a rushing hiss in the room; and his tortured lungs inhaled the sweetish smell. He fought and struggled at the door until blackness came.

The blackness roared. It roared loudly, and sparks shot through it. Occasionally a great, fiery-yellow globe would shoot across it, and then he couldn't see the sparks for quite a while. Gradually, they would reappear. Then would come the fiery globe again. So it went, over and over again.

But the roaring was less and less, and the sparks were becoming quieter in their movements. Now they moved in regular files across the blackness, like a parade. They looked like stars, he thought.

The realization came to him that he was conscious, and that his eyes were open. They *were* stars. The blackness was the sky. The fiery globe shot across, putting out the stars. That was the sun.

He tried to move, but couldn't. He couldn't move any part of his body. He felt as though he were molded in iron. Then he saw that he was looking through glass. He was in a case. He saw the dark metal around the edge of the glass. He was in a metal case, which in turn was encased in glass.

He began to think. The glass was yellow. Otherwise the sun would have blinded him. But why were the sun and the stars wheeling around him with the speed of express trains?

His mind became stronger. *He* was turning—not they. Now he discovered that he could move his arms and legs a little if he tried hard. When he moved his head, something flashing yellow caught his eyes. This interested him. The next time his head was turned that way, he saw something he had not noticed before. It was a big bulk—cube-shaped. The sunlight glared on it yellowly. It was near to him, and seemed to float in the emptiness.

Now he could stop himself from turning, and control his movements. He was very glad of that. Now he saw the Earth, with its blue sea of air. On the other side of him, the sun shone on a thing which he slowly realized must be the ship.

It was really a ball—a tremendous black ball, with a great winding-drum attached. He stared at it wonderingly for a long time.

Then he turned his attention to the cubicle bulk—a little island in space. It was certainly yellow. It was made of pieces of yellow stuff, in the shape of bars. It was some time before he realized that it was gold.

It was bound around and around with heavy wire.

In his case on one side Hand caught a white glare. Looking closer, he saw two sheets of paper. There were typewritten words upon them.

Resting himself comfortably, he brought the glass of his helmet close to the paper, and read:

"My dear Hand,

"You have a fair chance of reaching the Earth alive, if you keep your head. I shall tell you what to do.

"But first, let me express my regret that our last meeting was so unpleasant. I am an old man, and my temper is very uncertain. The fault was entirely mine. I hope you will accept my apologies, for I have a great favor to ask of you.

"You are now dropping slowly towards the Earth. Your rate of fall will accelerate rapidly when you get nearer to it, of course. A parachute is strapped to your back. The rip-cord is attached to the right side of your helmet and also opens the glass coffin in which you are. Pull it when the friction of the Earth's atmosphere begins to heat your case.

"You are in the space-suit which we used to make repairs on the outer surface of the ship. We had only one of them.

"Floating to earth with you is four tons of gold—approximately. It is all the gold we collected in the form of bullion. The greater part of our ransoms we collected in coins, which are easy to use. They have all been made use of. See where it comes to Earth, if possible. I hope it will not be lost. There is no other way to return it.

"Your descent should take about eight hours. You are not revolving with the Earth. You will stay in the sunlight. When you are in the Earth's atmosphere, it will drag you with it; and by the time you land, you will be revolving with the Earth.

"I cannot be sure where you will land, but I have tried to make it as safe as possible for you. Your suit will float in water. Proceed directly to Washington, taking the gold with you, if possible. You need not worry about Andrew McQuerdle.

"May God go with you! If you die, I shall know it;

and the short remainder of my life will be a living Hell."

● John Hand paused for a moment in his reading to gaze up at the great, metal ball hanging in space above him. He wondered if Gordon Wintermaine were watching him. Somehow, he could not doubt it. He read on...

"As I write, you are lying unconscious beside me. You are a brilliant man. Yesterday, you described my ship to me almost as well as I could have done it myself. There is little I can tell you.

"But, since I have much time in which to write and you will have time to read, I will explain a few matters.

"I did not build the ship. My brother, George Wintermaine, built it. You may never have heard of him. He was a scientist—brilliant, but wildly impractical. He dreamed of traveling to the moon. I never even knew it until after his death. Secrecy was his fetish. He built the ship in secret. He borrowed money in secret.

"The ship would not go to the moon. I think the disappointment helped to kill my brother George. After his death, I learned of the ship—and of the ruinous debts. I will never know how he succeeded in borrowing so much money. He used his name craftily—and mine. The ship ate up millions. He was a fanatic—unbalanced a little, I fear.

"I paid the debts. It all but ruined me.

"My work what people call the Personal Mortgage—is very dear to me. In a moment, I saw it wrecked. I was forced to refuse all applicants. I faced the prospect of having to cut off the incomes of my young men—yours among them, by the way.

"I tried desperately to get capital for my work. I failed completely. Billionaires refused to risk a cent to help me. They would have lent me millions to buy stocks; but they would risk nothing on my life work. I was bitter. It seemed to me that the world was all wrong, and needed adjusting.

"Then I had a wild idea. Perhaps I could make the ship pay for itself. I summoned the man who had been my brother's assistant. Together we worked, and our efforts met with success.

"You are wondering how we got the ship off the Earth. The rocket propulsion tubes could not do it alone. The other man had an idea.

"As you know, the surface of a metal sphere is the best storehouse of electricity. We charged the surface of the ship with millions of volts. Then we discharged it, using that tremendous power to create a magnetic field opposed to that of the Earth. As a result, the ship was momentarily deprived of weight. Our rocket tubes did the rest. It could never be brought back that way, of course.

"The ship did its duty. It paid for itself. And it tided me over the worst two years of my life. Now, my work is safe. Great and wealthy men have at last seen the value of it. A great corporation is being formed at this moment.

I said my work was safe. It is not. One man could ruin it all . . . *You—and you alone—could wreck it!*

"When you came to my office in New York, just five days ago, I did not fear you. I underrated you. I had so easily tricked you in the kidnapping of Ostermann. (He was lying in a cylinder on the roof of his own house while your army of searchers combed the grounds.) But you profited by that failure, and discovered more than I ever dreamed you could. When I learned you were in the ship, I thought I could safely let you stay there. Then I began to fear that I had again underrated you—as it proved I had. I came to you—pretending to be kidnapped—to find out how much you knew. When I found that you knew almost everything, I decided to abandon all operations, forever. I gave the prearranged signal for the men to leave the ship (when I "agreed to pay the ransom" over the telephone). The men got safely away. They will never be discovered or identified. And they are not aware of *my* identity.

"I am an old man. I cannot return to Earth. I am not afraid to die. One thing only am I afraid of. If it were known that I headed the Adjustors, my great work would die with me. There is much public hostility to it still. The truth about my criminal activities would sound its death knell.

"I ask you to keep my secret. That is all. I hope you will give careful consideration to the matter.

"Now, I shall say goodbye. When I have learned of your safe arrival on Earth, I intend to explode my lower rocket tubes, and leave this Earth forever. Perhaps I shall reach the moon, which my poor brother George never reached. Perhaps I shall go further.

"Kindly remember me to your lovely wife, whom I once had the great pleasure of meeting. Allow me to emphasize the great esteem and admiration which I hold for you.

Your friend,
Gordon Wintermaine."

● John Hand looked up again at the black ball in the sky, scarcely visible now smaller and more remote. Then he looked down at the Earth. Its blue sea of air was expanding towards him. It now filled half the sky. Behind the soft curtain he could see the great globe slowly turning. His mind ranged back through the years. A picture rose before his memory's eye. It was a composite picture, built of several little scenes.

He saw his wife, leaning over a hot stove in a room which also contained a bed; he saw her selling underwear in a large department store; he saw her lying in the bed in the room with the stove, ill and pale; he saw himself, a government employee, leaning heavily over his desk, sick with worry.

Then had come Gordon Wintermaine.

Another picture rose. He saw his wife on the sunny lawn of a mountain sanitarium; he saw her at her typewriter, doing the work she had always longed to do; he saw her driving a little car up a tree-lined drive to a white house with green shutters; and he saw himself, striding up the steps of the Treasury Building, taking them two at a time, feeling quite a man.

He looked down at the Earth, where it rolled slowly. He looked up . . . The little ball was lost in the black sky. Suddenly, he felt very lonely.

He had a feeling that the little black ball had been a more friendly thing than the rolling Earth below. Its great, mottled sphere did not look comforting. It appeared menacing, rather. He had a feeling that it would rush murderously up at him, suddenly. He found himself watching it fearfully, lest it take him by surprise. He felt for the cord of the parachute nervously, and had a

momentary panic when he could not find it with his clumsy gauntlet.

He remembered that he was a science fiction hero, and tried to be practical. But there didn't seem to be anything to do, after he found the cord. He fell to watching the Earth's surface—at first idly, then anxiously. A small continent had rolled away—Australasia; and now a broad ocean lay beneath him. It made him shiver.

Things began to happen more swiftly now. Almost before he knew it, he was well into the atmosphere. The faint blue color of it extended on all sides of him. The Earth began to loom large in his sky. Would that ocean never pass? At last a faint, dark shore-line appeared, and he grinned with joy. But it seemed to come around so slowly! He reflected that the air must be pushing him around now, too; and groaned. When he opened the parachute the air would push him more. He resolved to wait until the last possible moment to do that.

Now he imagined that his glass coffin was getting warmer. He tried not to think about it. Soon, however, there could be no doubt about it. He even felt the heat beating against his skin. He closed his eyes, and waited as long as he could stand the heat, in an agony of suspense. Then he looked down.

Land was beneath him!

Now he acted as swiftly as he could. He fumbled with the rope, and tore it from his wrist. He jerked viciously at the cord attached to his helmet. With a sigh of relief, he felt a strong upward pull. The gold dropped away.

He suffered agonies of burning. Gritting his teeth, he glued his eyes on the yellow glint of the gold, now seen against the dark green of a forest.

Then the burning heat subsided. Blazing white sand replaced the forest under him. He floated, it seemed to him, four hours. He passed directly over a mud-walled village, built around a clump of feathery palms. Soon after that, the ground began to come up fast. He crunched into the sand, was dragged a ways, and then lay still.

His could not tell how long he lay there. He heard nothing and saw nothing until a shadow fell over the glass of his helmet, and a black face gazed into his. There were other black faces behind, and shining, naked bodies. Anxiously, he looked into the faces for signs of intelligence . . . Suppose they were to take him for a God or something, and let him starve in there! Their mouths were gaping—their eyes wide with awe. It was evident that they did not dare to touch his metal suit. He cursed futilely inside.

Then they broke away; and he was grinning with relief, into the face of a young man under a sun-helmet. He felt the young man working on his helmet. After what seemed a long time, the helmet was drawn off over his head.

"Thanks!" he gasped. The dry sand felt good in his hair.

"Perfectly all right, you know!" The young Englishman, true to his national creed, refused to show excitement or astonishment. He would not ask questions or show a trace of curiosity until after John Hand had been made comfortable and fed. "I say, I'll have to find a spanner before I can get you out of this mess. All sorts of bally nuts and bolts and things . . ."

"There's one thing—" John Hand gasped. He felt weak, now, and speech did not come easily. "—My—my baggage—fell in forest—due east!"

The young man was solicitous. "Right you are! I'll send a couple of these boys for it . . ."

"It's—heavy . . . Four tons . . ."

"Oh, I say!" The other was taken aback. "That won't be easy. What I mean to say is this. Is it important? . . . I mean—is it valuable?"

"It's—gold!" said John Hand.

● A month later John Hand arrived in Washington, considerably ahead of the gold; and went directly to McQuerdle's office. McQuerdle was not at his desk. His assistant said to John Hand:

"Secretary Doan wanted to see you, sir, the moment you arrived."

John Hand went to the office of the Secretary of the Treasury, and was not kept waiting.

Doan was a small, lively man, with a big head, who rubbed his hands together feverishly, as though needing an outlet for his bubbling energies. His speech was sharp staccato.

"Come in, Hand—come in . . . Great Heavens, man, it's good to see you! Sit down, sit down. Well, well, well!"

"How do you do, sir?" said John Hand.

"Went to see McQuerdle, did you?" pursued the other. "Ha, ha! Went to report to McQuerdle. Ha, ha, ha!" Hand's questioning look appeared to amuse him tremendously. "Don't want a little trip to Atlanta, do you Hand?" . . . Report to the Old Boss in the Federal Penitentiary. Ha, ha!"

John Hand, completely bewildered, said nothing.

The Secretary of the Treasury became suddenly serious. "McQuerdle was a scoundrel, Hand—a thieving scoundrel. I always thought he was too smart; but I may as well admit it wasn't I that found him out. I'm telling you this, Hand, because you're taking McQuerdle's place, and because you'll keep your mouth shut. Wintermaine didn't want it known . . ."

"Wintermaine!" John Hand's interruption was entirely involuntary.

Doak leaned forwards across his desk, and spoke in a low tone. "Gordon Wintermaine broke McQuerdle. The day after you disappeared he sent me a pile of evidence big enough to jail ten McQuerdles. Wintermaine knew a lot of things he never told, I guess . . .

"There was a great man, Hand—a great man and a good man!"

John Hand merely nodded, not at all sure of his ground.

"—And to think that he should have been killed by the Adjustors! . . . I'm glad you've busted 'em up, Hand. A wonderful job! . . . We got a radio message from them today. Said it was their last. Said they regretted the death of Gordon Wintermaine. Said it was an accident—he tried to escape, and was shot. Said they were through for good now. Said we'd never hear from them again . . . Do you think we can count on that, Hand?"

"Yes," said John Hand softly, "you can count on that!"

THE END

Then they literally tore Drake out of the protective clothing. The angry Jovians hurled what appeared to be their only weapons.

THE "PLATINUM PLANETS"

BY GEORGE B. BEATTIE

● There will undoubtedly come a day when adventurous men will believe that the earth is too small for them; and they will feel the lure of the great, vast, mysterious spaces beyond.

To such men, no danger, no distance will be too great to encounter to satisfy their desire for unusual experiences. Each solar planet will have its own bizarre features, its own dangers, its own fascination. Here then is adventure to last men for some centuries to come.

Mr. Beattie's reason for writing this story, however, is not simply to show the future possibilities for adventure. He wants, as he says, "to deal a death blow to superstition," and to show that behind every belief in superstition there must exist some scientific basis.

All in all, he has written a thrilling and unusual story.

● Long, long ago, in the thirty-first century one Greatorex XIX 32 achieved the distinction of being the first man to visit all the planets in the solar system. He was a man of parts, a sculptor as well as a daredevil, and between his voyages he whiled away the time by carving exquisitely from materials he had brought from the planets, figures representative of the characteristics of each world's people.

From a block of the purest Venus alabaster, he wrought a life-like effigy of a Venusian maiden, entitling the work, "Beauty." The crafty men-ants of Mars he hewed out of Martian granite, and called the group "Cunning." He imprisoned the hot vapors of Mercury which on our cold crust solidified into a metallic ball, and from this he fashioned a miniature of the hideous giant worms with human skulls which infest the planet, and drag the hapless traveler into the sulphurous pools in which they squirm. This he called "Cruelty."

The flat disc-like amoeba of the outer planet of eternal twilight, Pluto, he modelled into the very embodiment of "Sloth": on stormy Jupiter he found a race revelling in an orgy of superstition and devil-worship; the inspiration for his statuette, "Awe." Riding the waves of the semi-fluid surface of Neptune, like gulls on the ocean were the Neptunian bird-men, whose simple integrity earned for them the title "Honesty", while the delicate insects of Saturn he honored with "Truth." On Uranus, Greatorex encountered no sign of life save for the swarms of monstrous pythons issuing from the crumbling stones of the ruined temples, relics of a long vanished civilization. Indeed, he narrowly escaped with his life when securing the block of stone from which he carved the Uranian masterpiece, "Despair."

The figures were small, not more than a foot in height, but they were exquisitely wrought by a master-hand. When they were finished, Greatorex coated them with platinum so that they might be preserved to posterity, and set them up in a little studio at the side of his house with other relics of his voyages, for public edification. Then, wanderlust seized him again, and he set out for the asteroids.

When the explorer returned, he found gone all that the earth held for him. War had blasted the world once more with its foul breath, and his fair country had been overrun with the African hordes. True, the invader had been beaten out again, but Greatorex's wife and children had fallen victims to deadly rays of the combatants, unwittingly murdered in their own home.

Greatorex had tarried so long in the Asteroidal belt that the terrestrial war had been almost forgotten by the combatants. The madhouses were full of unfortunates blighted by brain-destroying rays, but these asylums were in remote spots, well out of sight, and therefore out of mind. So completely, indeed, had the horrors of the late war faded from the public mind, that the American government was actually raising a loan to help the defeated side to put its country in shape again.

Fresh from the unknown, the ghastly business felled Greatorex like a pole-axe. He cried to his country's leaders for vengeance, while they were already playing checkers and clinking glasses with their late antagonists. The leaders laughed, the diplomats deprecated, the soldiers scoffed: but the explorer burned with thoughts of retribution, for iron had entered his soul.

How, finally, with a few kindred souls, he descended on Africa and, under the very noses of the soldiery, he stole the black crown prince from the palace, and smuggled him to his fastness, would take too long to tell. How he tortured the stalwart black, and finally killed him on the spot where his wife had died, would prove too harrowing. While how, from the thigh bone of his victim, he sculptured the last of the effigies, representing the Earth, is a tale that has been told many times before.

It is a hideous piece. A grinning dervish, whose whole poise, and glance, seems to emanate evil, is slowly crushing the life from a woman prostrate beneath his heel, while the fiend has impaled her babe upon a bayonet.

Greatorex covered the grisly relic with platinum, and called it "Slaughter." He set it up with the other statuettes in the studio, took off in a solo space boat, and disap-

peared into the stellar void once more. He was never seen again.

● At any rate, that is the legend, although, of course, at such a remote date it would be very difficult to vouch for its impeccable veracity on every point. There can be no such doubt, however, with regard to the curious superstition which grew up regarding the "Platinum Planets", as the figures came to be called. Naturally, they were not allowed to remain long in the shrine. A distant relative arose, obtained papers presuming the explorer's death and, in double-quick time, he auctioned the effects. In this manner, the "Planets" became widely separated: collectors from various parts of the world vieing, one with another, for possession.

As the centuries rolled on, the "Platinum Planets" gained in value, until the set became a synoym for the unattainable or impossible. Much as, in an earlier age, one would talk of going to the moon for a pound of green cheese, so one would now talk of getting together the set of the "Planets." From time to time wealthy men did actually succeed in accomplishing the feat, but on each occasion on which this happened, such a train of disaster engulfed the owner that the set was disbanded very much more speedily than it had been got together. The superstition eventuated that the nine figures could never be housed under one roof, without a dear one's blood being shed.

Indeed, in that hysterical age in the "eighties" following the devastating Yellow War, more than one fanatic laid the whole blame for the war on the American Art Commission, who had saved these historic pieces for the nation, and had placed them in a special museum. After much controversy, Ignace Pascal, a millionaire crank, following out his theory that peace on earth could never be until each piece had been returned to the planet it represented; purchased them and set about putting his theory into practice.

How far he succeeded, no one ever know, for he and his unfortunate crew were believed, although concrete evidence of this was never forthcoming, to have perished in the terrible storm clouds of Jupiter. Howbeit, as time passed, the world forgot the "Platinum Planets", but the legend was banded about by the superstitious like a tale from Greek mythology.

* * * *

For a mere babe of thirty years, Jackthorpe R/43 had a pretty wit and a pleasing intelligence. He could debate with the master scientists of ten times his years, with a profound assurance and a cool cheek which carried his point much more easily than dry academic argument would have done. Add to this the fact that he and his baby brother owned half of the lunar radium fields, and you will readily gather that Jackthorpe was a young man who usually got what he wanted.

Physically, he was always in marvelous trim, even for a fiftieth century man, and had but to hear of some new scientific adventure, to embark straightway upon it. His only care was his little motherless brother, to whom he would relate the hairsbreadth escapes and bloodcurdling encounters he had had in visiting the other planets, at an age when the average infant was content to be informed that "Mary had a little lamb."

As the years passed, Jackthorpe Minor, or R/44 as he was officially designated, or again, "Bunch", as Jack lovingly called him, would beseech his brother to take him aboard every time the *Asteroid*, the great red space-flyer was being prepared for a further interplanetary trip. But Jack always laughingly shook his head and wagged his finger, with, "It's not a kid's game, Bunch: wait till you grow!" And, although his whole brain was teeming with visions of the great universe of peril and adventure, perforce, Bunch had to wait.

By the time he was thirty-five, there was hardly a thrill in the whole universe which Jackthorpe R/43 had not sampled, and the prospect of having to settle down to an average life of six or seven hundred years, listening to the radioed market reports, and making speeches in Congress that nobody wanted to hear, appalled him. Yet that was what all members of his class were expected to do once they had reached maturity. And, as he appeared to have exhausted the complete list of possible adventures, there really seemed nothing else for it. Still that did not prevent the prospect plunging him into a deep gulf of depression.

Just when the world seemed bluest, he heard the legend of the "Platinum Planets." In his life of action Jack had no place for superstition. It was an ugly thing to be trodden underfoot like a venomous asp and, if one thing more than another was calculated to rouse his ire, it was any suggestion of the dark workings of supernatural forces.

Here, then, was a golden opportunity, not to be missed, of enthusing life with the spice of adventure, and at the same time of dealing a shrewd blow at his pet aversion. Wherever they were, he would collect together the dreaded effigies and exhibit them as an eternal reminder of the triumph of science over the dark forebodings still lurking at the back of the mind of the moderns as legacies from prehistoric man.

With Jackthorpe, thinking meant acting, and almost before one could repeat "Projected Platinum Planets Planetary Pursuit", he was leaning over the bow of the *Asteroid*, and mumbling the familiar words, "No, Bunch, not this time: it's not a kid's game: wait till you *grow!*"

● Nearly a year later, as we count time on earth, the *Asteroid* was moored on the Jovian Satellite I., and Jackthorpe was facing a disgruntled and well-nigh rebellious crew.

"It's no good, I'm afraid," confessed Captain Drake, as he returned from a conference with the men. "They're simply scared stiff of what lies below." He pointed significantly through the port window to the whirling tempestuous belts of heavy gases clinging to the rapidly-turning planet Jupiter.

"After all," he continued, "It's hardly human to expect them to plunge themselves into that tornado, an atmosphere six times as thick as our earthly one, whizzing round at two hundred and fifty miles an hour. And for what, I ask you? Ten to one to be toasted to a cinder by the inherent heat of old man Jove. It's blinding even from here."

The Captain shaded his eyes, as a rift in the angry clouds momentarily exposed the brilliant red light from the inner planet, the famous "red spot" which had so baffled the early astronomers.

"And suppose we *do* get through the thousand mile belt

of cyclones, what then? Most likely we'll finish up being cooked over a slow fire by those bone-hunters below. And for what, I ask again? Because the little 'dicky-bird men' on Neptune whispered to you that most of the trinkets we're after, are being worshipped somewhere down on that crust. A few inches of hardware on a planet that's two hundred and eighty thousand miles round the waist, eleven times as much as the earth's circumference, with a gravity so intense and an atmosphere so heavy that we'll be lucky to make a mile a day once we land. I tell you, sir, it's hopeless."

Jack looked up, smilingly. Nevertheless, his jaw was thrust out at an angle, and there was a steely look in his eyes which Captain Drake knew well.

"You're a rotten advocate, Captain. You have understated the case by a thousand per cent. The dangers and hardships we shall encounter are many times greater than you have indicated. All the same, *we are going!*"

And that, as Captain Drake well knew, was *that*. The men went about their tasks sullenly. The *Asteroid* was overhauled thoroughly, every bolt and rivet receiving the keenest scrutiny, so that the great ship might withstand the terrible buffeting it would receive in the whirlwinds.

Jack encouraged them, and Drake bullied them, but it was clear to see that every day was bringing them nearer and nearer to open mutiny. Defiant glances exchanged as Jackthorpe passed, and the work proceeded to an accompanying obligato of muttered curses and threats.

When, at length, the great ship rose from the surface of the satellite, an ominous calm reigned: the calm before the storm. Within an hour they were battering, an angry mob on Jack's stateroom door, demanding that the ship be turned towards home, and hurling ugly threats at Jack and the Captain. Jackthorpe was coolness itself.

"Who is your leader?" he asked, and the words came like the retorts from a Lewis gun.

A big bully of a man, with a bald cranium like a hard-boiled ostrich egg gruffly claimed the honor.

"Then take the helm, and see what you can do with it. The ship's yours!"

George B. Beattie

CHAPTER II

Into the Fury

● With a great bellow the men ran forward. The big fellow, Martin 987/YT by name, in his excitement roughly threw the helmsman aside, and took charge of the wheel which determined the direction in which the series of rockets should discharge. A look of blank amazement passed over his ugly countenance, and was reflected a dozen times on the faces of the dumbfounded crew. For not an instrument showed the slightest deviation from the original direction. The ship was hurling itself towards Jupiter at an ever-increasing pace, and the helm refused to answer.

Jack and the Captain had followed. The latter looked mystified, but the owner was smiling.

"A few minutes ago I said we were going to Jupiter, and what I say goes. I foresaw something of this kind arising, so arranged a servo control operated from my stateroom. You can turn the wheel till your blue in the face, but you are powerless to alter our direction."

The big fellow with the bald head gave a snarl like a hunted pig, and rushed at Jackthorpe, only to find himself looking down the barrel of Captain Drake's ray pistol.

Jack brushed the gun aside.

"Now, look here, fellows," he said sharply, "we've had enough amusement. From now on we're starting work. You know the terms of your contract. In addition to your ordinary wage, you are to receive a thousand dollars each, for each one of the trinkets we discover, and you must expect to face a little danger. In any case we are going on. You've no alternative. Carry on with your jobs, and we'll land O.K. Play the fool, shut me up, kill me, or throw me overboard, and you're sunk. Not even Captain Drake can alter that servo apparatus once I've set it. And if it remains as it is now, the gravity of the planet will seize hold of the ship, and you'll be smashed to pulp. There's your choice —certain death, or . . . sticking to orders!"

Sullen for a second, the men broke almost immediately into a cheer. All, that is, except big Martin. He slunk to the back of the group, muttering to himself.

Already, even on the outer fringes of the atmospheric envelope, the *Asteroid* was encountering a windstorm which would have been described as a gale, had it occured on earth, and every mile the ship plunged forward, the density and velocity of the heavy fog-like gases seemed to increase, and the variability of the currents to be magnified. The gravity pull was now considerable, yet the wind force was becoming so terrible that the giant ship was being carried hither and thither like a paper bag in a breeze.

Now it would be sucked down in the eddying core of a gigantic "twister" tornado, now it would be borne upwards before a great windspout. To resist this play of the elements to any marked degree would have been fatal. By driving flat out, Captain Drake could have forced a passage through the vaporous fury, but the immense friction set up would have consumed the ship by fire in a few seconds, even if the resistance had not torn its girders asunder.

Right into the heart of a group of deathly black clouds plunged the vessel, a blackness only equalled in interstellar space itself. Drake shot off a couple of rockets to the left, and the ship, shaking itself like a collie dog, seemed for a moment to right itself. Then it started to circle round and round, at first slowly and in wide circles, then faster and faster, like a top, like a pinwheel, in a mad merry-go-round.

Impossible to see what was taking place, it was easy to

guess. The ship had been caught in the maelstrom clouds at the root of a tornado. In another second, it was caught by the palpitating tuber emerging from the massed clouds and, whirling madly, borne downwards at a thousand miles an hour. Then with a sickening lurch, the writhing mass seemed literally to kick the ship away from it, through the calmer atmosphere below.

Stunned and bruised, captain and crew lay collecting their scattered senses. Suddenly a light appeared around the ship.

"Good grief," said one who, was by way of being a humorist, "we've got a halo already."

At this the captain looked up dazedly. From whatever window one looked, for a distance of a few yards from the hull, the atmosphere was bright as a sunny day. With a startled cry, Drake rushed to his feet and threw the reverse rocket switch.

"We're on fire," he shouted. "The 'twister' gave us such a huge parting kick through the heavy atmosphere that the friction has made our sides glow like an incandescent mantle."

● With speed gradually decelerated, the light slowly died down. It was calmer now, but, if possible, darker than ever. A great sheet of lightning suddenly illumed the whole firmament, followed almost instantly by terrific thundering. Again and again this was repeated as the ship glided slowly through the pitchy black clouds. Drake was trying to steer a wide spiral course so that he might eventually make a safe landing despite the immense gravity.

All at once the place was lit up with a reddish glare. The men blanched, fearing another fire. But Jack and Captain Drake reassured them. The worst was over. They had passed through the awful atmospheric storm belt into the quieter, denser stratum below, and the red light came from the planet Jupiter himself.

It was raining, yet little of the rain was reaching the ground, the heat from the giant planet causing the moisture to evaporate before it reached the crust. Dense mists of water vapor hugging close the surface of Jupiter still hid the actual landscape from view. Volplaning down, with reverse rockets going, to counteract gravity, Captain Drake gradually brought the *Asteroid* through these white mists.

Somewhat attuned as they had now become to the red glare, they were dazzled indeed by its brilliance now that the final envelope of vapor had been pierced. The scene, too, was one of bizarre beauty. The earth was not red, although the light diffused through it from the incandescent gases in the interior, imparted the red glow, but was of many shades of slate and brown, much like our own soil. For the most part it was covered with dense vegetation of yellow and purple which, viewed through the binoculars, resembled the plants that grow on the bottom of the ocean much more than earthly trees. The surface undulated in great circular corrugations, that held out little hope of a suitable landing place.

Presently, cruising around, they spotted a clearing. On the hillsides of one of the corrugations, a veritable honeycomb of holes could be seen while, in the arena within, ten thousand or more squat figures stood, symmetrically arranged like an army on parade.

The short broad Jovians stood stock still as though riveted to the spot: nor did they appear to have noticed the great ship cruising above them. Lower and lower drifted the *Asteroid*, until the features of the figures could be clearly made out. They had gorilla-like bodies, but their faces were unmistakably human, although clearly a humanity low in the scale of evolution. The most noticeable features of these strange people, however, were their utter immobility, and the fact that they glinted like burnished gold.

To Jack's order, Captain Drake brought the vessel to a standstill in a corner of the great clearing. The Jovians took not the slightest notice, remaining as rigid as statues. Jack tossed the captain a metallic suit and a curious pair of boots, the latter attached to a small control board.

"What devices are these?" asked Drake.

"Pilling's patent air-pressure control suit and rocket boots for making headway on planets where the air pressure is high, and the gravity great," said Jack, scrambling into a similar rig-out. As he did so, he caught sight of Martin scowling in the shadows. Good idea, he would have him with them, and a third suit caught the big fellow a plonk on his bald pate.

He glanced defiance, but shovelled his great carcass into the curious habit.

Once out of the vessel, the trio found they could hardly move a step through the dense atmosphere. Their feet seemed to be glued to the ground. The Jovian air, was, as Jack knew, quite breathable if supplied at earthly pressure. The Pilling suits they were wearing could be set to maintain such pressure only, a valve allowing fresh air to be admitted to the suit and headgear, a pump forcing the exhaled air out of the suit again. Despite the great pressure without, an earthly atmosphere could be maintained within the metal suit.

"Now turn down the left switch," ordered Jack. Immediately a series of small retorts were heard, and the boots were propelled forward alternately left and right, at a sharp walking pace. Progressing thus, they soon reached the first phalanx of the Jovians. They could see now that these beings were almost as tall as men, yet much broader, but they gave not the slightest sign that they had seen or heard the Earthmen approach. Nearer and nearer the latter crept, yet neither a wink nor a nod did one of the ten thousand Jovians bestow on them.

● At length Jack was near enough to touch the nearest man. He raised his arm, slowly, painfully. It felt as though a ton weight were pulling it back. At last, however, he managed to get it laid on the man's shoulder. Still, he took no notice. His body felt hard and metallic. Jack peered into the man's face. It was life-like but lifeless. The whole being was a mass of red gold. Then he burst out laughing.

"What fools we are. We're in a field of statues."

"But," said Captain Drake, "it looks like gold!"

"It . . . *is* . . . gold!" cried Martin excitedly, fondling the statue. And he would have tried to lift the thing bodily from the ground, had Jack not caught him by the arm, and pointed to the hills surrounding the clearing. There, issuing from the honeycomb holes, were thousands of similar figures. Similar, except for the fact that instead of being gold colored, they had a hairy skin that outrivalled a peacock's tail in its many and gorgeous hues; and for the much more material fact that they were mov-

ing and brandishing business-like clubs, in a masterly fashion. To earthly eyes, they moved strangely, as though they were being viewed through a slow motion camera; yet they were closing in on the vessel from all sides, murmuring angrily.

"Let's beat it quick!" shouted Jack, and with a last avaricious look at the golden field, Martin tore himself away. With the rocket boots at "full speed ahead," they had ample time to reach the ship before the soaring Jovians could, with their slow fantastic leaps, close on them. Within half a furlong of the *Asteroid* however, Captain Drake found himself unable to move. Slowly but implacably he found himself sinking into the soil. He tried to raise himself, but only sank the deeper. And before he could attract the attention of the others, he had gone in to the ankles. As he continued slowly to gravitate, he felt the pitchy mud warmer. They struggled and hauled at the unfortunate captain but he sank down and down until he was engulfed up to the waist, and Jack noticed with consternation that the ground was also beginning very slowly to give way beneath his own feet.

Despite the ludicrous sloth of their movements, the Jovians were circling round in narrowing curves like vultures descending on carrion. There was but one thing to be done. Jack jerked off the helmet of the captain's suit, and pried open the breastplate. Then he and the big sailor literally tore Drake out of the protective clothing, set their rocket boots flat out, and carried him to the companion way of the *Asteroid*.

As they did so, they heard the clatter of stones behind them as the angry Jovians hurled what appeared to be their only weapons, the large stone clubs. But, like the beings themselves, the missiles traveled slowly through the dense atmosphere, and speedily fell to the ground owing to the mighty gravity.

They were safe, but the force of the struggle through the heavy air had bowled the captain over. With restoratives, he regained consciousness, only to be thrown immediately into great agony: the aftermath of being subjected to the great atmospheric pressure.

CHAPTER III

The Planets Found

● The Jovians jabbered excitedly, crowding round the vessel, and hurling defiance and clubs at the Earthmen they could see through the windows.

"Get out the thought receiver," commanded Jack, "and let us discover just what is their grievance." The machine was set up, and Jackthorpe projected its narrow beam focusing it on one of the most prominent of the Jovians. Then he glanced into the eyepiece. He did not look for long.

"Good Lord!" he ejaculated. "No wonder the beggars are angry. That field of statues is one of their cemeteries. These gold figures are their dead ancestors, whose bodies they plate with gold to preserve them. They are demanding that Martin and myself be thrown to them for sacrifice. When we touched the beastly things we committed sacrilege to the nth degree."

"Guess we'd better get while the going's good," suggested one of the men with a scared face, as he looked down on the sea of babbling apes.

"Rot," jerked out Jack gruffly. "Set up the projector." The thought-transmitter or projector was soon in place, and traversing slowly with its wide beam, Jack concentrated deeply and thought vividly as he adjusted its headpiece.

Through its medium, he assured the Jovians that the Earthmen had sinned through ignorance, and offered his apologies. He made it plain, at the same time, that they were all-powerful beings who could, by a turn of the hand, destroy the whole Jovian community in a few seconds. A great change overcame the multitude. It ceased its babbling, and a low fearful muttering was substituted, as the broad beam of the transmitter was projected here and there among the crowd.

Captain Drake had recovered sufficiently to take an interest in the proceedings, and was gazing intently into the eyepiece of the thought-receiver.

"They want to know now, if we don't intend to tamper with their dead, or harm themselves, why the hell we're here at all," he announced, as the images came to him from their leader's brain through the uncanny mechanism.

Jack summoned up all his concentrative ability, and told them through the medium of the transmitter that they had come merely to possess a few trinkets which they believed were to be found on Jupiter. A wave of incredulity passed over the mob at this. Jack made a further effort, and pictured as much as he could remember of the "Platinum Planets" based on art prints of them he had seen.

Immediately, the chorus of angry cries revived itself a hundredfold. Jack pushed the Captain unceremoniously away from the receiver, and pressed his eyes against the lens. He gave a low whistle, for the brain picture emanating from the Jovian leader bewildered him.

There, lit by the red glare of a giant volcano in the background, lay Ignace Pascal's space flier of centuries before. An avenue of the golden dead guarded the entrance to the massive ship. But, as Jack peered through the eyepiece, he could see that these were not the ape-like Jovian men such as beleagured the *Asteroid*, but taller thinner men, Earthmen, Americans or Europeans.

There was old Pascal himself; he could recognize him from the old films of the expedition preserved in the National Museum. And Captain Keller, too, and Mc-Beth, the engineer. They were all there. The devils had killed them and plated them with gold, then mounted them over their space ship to keep guard. But to keep guard over what?

The image from the Jovian's brain dissolved, and Jack could now see the interior of the space ship. He held his breath, for there, arranged on a high altar, were all of the "Platinum Planets" with the exception of "Slaughter." This, as Jack knew, Ignace Pascal had left, where it rightly belonged, on the earth. Priests and acolytes bowed before them, while wretched captives lay bound for sacrifice in a corner of the space ship.

The seething mass of ill-shaped humanity yelled itself hoarse in grisly anger, but Jack and his good captain remained calm and confident in their own security.

Jack turned to the transmitter, and demanded to know where the "Platinum Planets" lay. An intense wail greeted this request, but the Jovians could not keep their minds off the question. By focussing the narrow beam on first

one man and then another, Jack, through the eyepiece of the receiver, got a pretty fair idea of the direction in which the volcano lay. Almost half the circumference of the giant planet it lay away from this spot, yet many of these men had made the pilgrimage. Evidently the "Platinum Planets" were regarded as the holy of holies, a Jovian "Mecca."

"Well, we've got all the information we'll obtain here," announced Jack. "We had better be buzzing."

● Nothing loath, the crew took up their stations, and Captain Drake released the immense rocket shots which was required to overcome the gravity of "ole man Jove." They had been anticipating some reaction on the natives, but they were not prepared for the tragedy which followed. As the flaming gases rushed out the ship shot upwards, and a great hole was blown in the earth from which it had risen. But the hole immediately seemed to fill in again, and hundreds of Jovians sank slowly into the ground on which they had stood so firmly the moment before.

As they watched, the horrified Earthmen saw the Jovian earth eddying outwards in a series of ever-increasing circles, as the water in a pond does when a stone is cast into it.

The horde of Jovians bolted to their hillside burrows as fast as their slow-moving limbs could carry them. But it was not fast enough for the majority of them: the surging earth broke under them, and they sank with horrible cries into the pitchy semi-fluid mass which slowly, relentlessly, engulfed them.

"God," cried Captain Drake, turning from the sickening spectacle. "What does it mean?"

"It means," replied Jack, "that we have had a remarkably lucky escape. As I have suspected since your own alarming experience, apart from a few inches or feet of solid crust, Jupiter is still in a fluid, or semi-fluid condition. That could hardly be otherwise considering that all its available light and heat, or nearly all, comes from the interior of the planet.

"The Jovians are always, as it were, skating on thin ice. Any disturbance, such as our rocket explosion, will set the fluid eddying outwards in waves, breaking the thin crust as it goes. Then, too, I expect the landscape abounds in 'thin places.' You, no doubt put your foot in one of those."

The horror of the catastrophe, which, had the Earthmen known to be possible, could have been prevented by frightening the Jovians to their holes through the thought pictures, threw a blanket of depression over the whole ship. The crew began to get homesick again, and started to implore Jack to return.

To the latter's surprise big Martin turned about on his former attitude, trounced his companions soundly for chicken-hearted cowards, and declared his intention of following his leader through Hell if necessary.

Martin's *volte-face* worked wonders. The men set about their tasks with a good will, and Jack was gratified to think that personal contact had wrought such a change in the man. But Captain Drake shook his head. "A leopard does not change his spots," he quoted sententiously.

Despite the fact that a Jovian night and day, judged by rotation, occupy together only nine hours and fifty-five minutes, the travelers found no conscious division of night from day. The feeble light from the far-off sun was almost completely cut off by the dense dark clouds of the circling envelope; the inherent light from the planet itself, naturally, shining continuously.

Hence, they were just as dependent upon their instruments to record time, as though they had been flying through interstellar space. It was seldom, indeed, that even one of the nine satellites could be glimpsed for more than a moment through the black pall of storm clouds.

On they went, over the corrugated plain that seemed monotonous in its endlessness. Everywhere the same seaweed-like vegetation seemed to flourish, and everywhere the sides of the hills were punctured with a myriad holes. Everywhere, too, the fields of "gold-foiled corpses", as Tubby Cantor called them, abounded. Their ship cast no shadow on the ground, although a blurred image of it appeared in the mists above their heads. Progress was naturally slow because the frictional fire risk of rapid travel was great; the heavy atmosphere threw a great strain on the skeleton; and, most important of all, the discharge of anything more than the smallest rockets would undoubtedly draw the attention of the Jovians dwelling below. Jack was intent on purloining the "Platinum Planets," and the element of surprise formed the crux of the whole plan.

● To match the even temperature, and dull uniformity of the landscape (for there appeared to be no seas or lakes, rain falling when the lower mists became saturated, only to evaporate almost as it touched the baked crust), the Jovians seemed to be all of one vari-plumaged nationality. And, as far as the travelers were able to judge, none seemed to have spotted the *Asteroid* flying as noiselessly as possible high above them.

After seventy hours of continuous flying, the red and yellow flares of the great volcano landmarking their objective could be seen. That meant that they were within a few miles of it, as visibility in the heavy atmosphere was, of course, very bad. Captain Drake sailed upwards until the ship was in the fringe of the mists. Then, at an even slower pace, he proceeded cautiously.

The volcano, outlined in sharp relief against the gray black of the Jovian storm clouds, was a fearsome thing. In its ruddy glare, the priests moving to and from the old space ship, looked like imps in an all-to-real inferno. The avenue of golden dead, made up of Pascal and his officers and crew, stood there just as Jack had seen them through the thought receiver. And, even as they looked, they saw a poor struggling wretch dragged through the avenue into the doors of the space flier: another sacrifice to the "Platinum Planets." Big Martin's eyes bulged out of his head.

But it was not the pathetic scene before him that moved him: it was not the thought the object of their expedition so near at hand: it was the thought of so much gold waiting there, ready to be lifted.

As usual Jack did not wait to act. He had formed his plans as they approached and, as the ship cruised at minimum speed above the space flier, he quickly adjusted his rocket boots, and prepared to fit the Pilling suit to his body.

"No, boys, this is my game," he said as he waved off several eager volunteers. "I'm going alone. They won't spot *one*, where a number would attract attention. And, remember, no violence. We've done enough damage al-

ready. If I don't turn up within a reasonable time, you're to sail without me. I'll have no more lives lost, and no reprisals."

The great helicoptic wings of the flier were spread, and the immense ship descended swiftly and vertically. At the same time Captain Drake moved the beam of the thought transmitter from acolyte to priest, and priest to acolyte, commanding them through its medium to hasten on distant errands. It was astonishing to see how they obeyed the suggestion. They would look up, as though they had suddenly thought of something, and then make a dart away from the golden avenue. Soon, by the power of suggestion, Drake had cleared the square.

The ship was now about tree height from the ground. Jack threw out a rope ladder and, taking a big sack over his shoulder, was thrust out of the valve. So busy had they all been that they had not noticed big Martin almost duplicating these actions on the other side, with the help of his more immediate pals. Jack had hardly touched the ground, when the big sailor slung himself down the rope ladder from the opposite port, and hid in a clump of seaweed trees.

Setting the rocket-boots in motion, Jack proceeded up the avenue. Urgent though his mission was, he could not resist stopping for a moment to look at the lane of golden explorers, standing in such life-like attitudes. A staircase that looked as though it had been transplanted from a Dicken's house, led up to the entrance to the vessel. Here the boots were more of a hindrance than a help, and it was only with the greatest difficulty that Jack succeeded in climbing the obstacle.

CHAPTER IV

A Tragedy

● At length, however, with wind knocked out of him, he scrambled into the curious temple. The stateroom had been lined with beaten gold, and a strange blue-shot metal which Jack could not identify, but which shone iridescent as an opal. The high altar, which he had seen in the brain-picture, was of this metal, and on it stood the "Platinum Planets", clean and polished as though they had just left the hand of their creator. A priest was making obeisance to them, and in a corner lay a sorely bruised and bound Jovian youth.

To overcome the priest with fumes from a subtle ammonia-compound generator was the work of a second. The man lay as though dead, but Jack knew well that he would recover in a few minutes. As he tried to lift the first statuette, however, he found that it was fixed, immovable: it seemed to form a part of the very altar itself. He tried another, and another, and another; they were all alike. There was more than Jovian gravity to account for this: the blue winking stone must exercise a curious magnetism.

Time was pressing. Drake could not keep the whole ecclesiastical establishment running messages all day, while who knew how many acolytes lurked in the other chambers of the space flier? Standing with his back to the altar, Jack placed his hands behind him, and clasped the first effigy. With a jerk of his body he managed to throw the switch operating the rocket boots and, holding on to the trinket like grim death, he set up a tug of war between the rockets and the magnetic altar. The boots won, and he quickly threw the statue in the sack. Then he started on the second, then the third, and the fourth.

The noise of the rockets in the heavy air seemed deafening. And, as each prize was secured, Jack felt an increasing horror of discovery. But he was not going to take less than he had come for—the whole set. At last the eight figures were in the bag. No one had yet appeared, but he could hear ominous heavy footfalls coming slowly towards the room from another part of the ship. He gathered up his sack and, not without difficulty, got it across his shoulder.

As he did so, he glanced involuntarily at the pitiful object trussed up in the corner. There was such a pathetic look in the lad's eyes, so like the harrowing appeal of an injured antelope, that, heavy laden as he was, he bent down and severed the kelp-like bonds. His act of mercy nearly cost his life. The Jovian youth clung to him, like a drowning man clutching a straw. And, at that very moment, two Jovian priests, whom the racket of the rockets had aroused, loped gracefully and wrathfully into the room.

At the sight of the double sacrilege they howled in agonized choler, and while the one beat upon a huge gong of gold, the other pursued the burdened thief who was having hard work to negotiate the tortuous staircase, as he half dragged and half carried the benumbed youth and the bag of images.

Slow though the priest moved, his grisly paw was almost on Jack's shoulder as the pursued man reached the bottom of the stairs. Jack could hear the Jovian's breath coming in short gasps. He was an old man and unaccustomed to such athletic fare as this chase provided. Jack could hear, too, the strident tones of the great gong, and he could see, from all sides, the acolytes hastening in prodigiously slow leaps to its call.

Once in the open he had little to fear. He jerked on the full power and, despite the weight of the treasure, and the cumbersomness of his living burden, the boots answered well. And, as he was being hauled up the rope ladder, he caught a glimpse of his one-time pursuer sitting on the bottom stair, puffing and blowing like an asthmatic porpoise.

"Shove this chap into the pressure chamber," he ordered indicating the bewildered Jovian youth, as he tore off his helmet. "He'll probably peg out in our rarefied atmosphere, if we don't acclimate him gradually. Then all hands to their posts. We'll get under way before these beggars get near enough to be injured by our rocket discharges."

"But . . . sir . . ." commenced one of the men nervously. "What about big Martin?"

"Well, what about him?"

"He's . . . well, sir, partly . . . like . . . gone out, sir."

"Partly gone! What the Hades do you mean?" And Jack strode over to the port window.

● While Jack had been so busily engaged in securing the treasure, Big Martin had been on a treasure hunt of his own. As soon as Jack had entered the Pascal ship, the big sailor stole from the seaweed clump in which he had hidden and, keeping close to the fringe of vegetation, he circled round until he reached the nearest of the golden figures.

Locking his ape-like arms round the effigy of Pascal, and setting his rocket boots flat out, he gave a mighty heave, succeeding in dragging the figure along with him. His accomplices hoisted "Pascal" aboard. But Martin's greed was only partially sated. Breathless as he was, he darted back to the avenue and tried to annex the second figure. This was a great hulk of a fellow bulging amidships. The exhausted Martin only managed to topple the figure over. Excitedly, he tore off a great piece of the gold shell, threw the switch, and the boots moved forward a yard. Only a yard, and—the rockets failed!

Feverishly the big fellow wriggled and twisted in an effort to get the mechanism going without losing hold of his booty. It was no use; the device was dead. As he glanced down at his feet he saw with horror that he had stopped right in the middle of a "thin spot": he had sunk several inches already.

Even then he might have saved himself, had not his consuming avarice asserted itself. He clung to the great chunk of gold when, had he thrown it from him, his great strength no doubt would have enabled him to extricate himself. As it was, borne down by its great weight, his efforts to pull his feet out of the gluey mess were useless. He continued to sink slowly but surely into the morass.

So busy had he been securing his treasure that he had not heard the boom of the great gong, nor the cries and wails of the angry Jovians. Now, stuck fast and helplessly looking round for some avenue of escape, he saw the dozens of ungainly and angry priests moving with leaden feet towards him, their stone clubs poised above their savage heads. With a great yell, he threw the piece of gold away from him, kicked and struggled. It was too late. His struggles served merely to immerse him the further in the trap.

Things had developed thus far when Jack darted to the window. Like their leader, the crew was shocked by what they saw, and more than one brave fellow was for going down to rescue Martin. Jack restrained them. The distance was too great. Long before they could have reached the spot, much less pull out the unfortunate sailor, the Jovians would have reached him and despatched him. There was only one thing to do. Jack did it.

He swung round the thought projector, playing its beam on the leaders. Concentrating deeply, he ordered them to stand still. For a moment they obeyed. But it was only for a moment. Steeped in superstition for aeons, everything that they held sacred had been violated by the Earthmen. The one who had filched from them the "Platinum Planets", had got away scot-free, but the gods had delivered into their hands to pay for both crimes this other who had desecrated their golden guardians.

Their minds were full of vengeance and, while suggestion might have acted under normal circumstances, their hate-filled brains rejected it. After the first slight wavering, they came on, steadily as before.

Jack concentrated harder and harder, but it was of no use. Captain Drake tried what he could do, but it was of no avail. On they came.

By now, Martin had sunk up to the waist. From the ship the watchers could see his frantic struggles, could hear his anguished cries, and could even see the horror imprinted on his face, for he had torn off his helmet. The Jovians with their fantastically slow steps, moved nearer and nearer towards him.

There was nothing to do. They had a weapon or two, but they were of very short range. Captain Drake took a shot with his ray pistol, and set fire to a clump of the seaweed trees. But so intent were the Jovians on their quarry that they never noticed the effort, which had fallen at least a hundred yards short.

"God, we can't see him murdered in cold blood!" cried Jack as the circle of Jovians surrounded the terror-stricken Martin. "Let go a rocket shot and make it a big one!"

● The ship shot upwards, as the flaming gases were released. A great hole was ploughed below them, revealing the pitchy bubbling substratum, and the gradually increasing wave circles commenced. But the Jovians never turned. They were full of the lust of the chase. A great club swung through the air and caught Martin heavily on the chest. He sank up to the armpits. Another club buried itself beside him, another and another. He was up to the neck now, but his eyes were bulging with horror. Then a better-thrown missile pulped in his shining bald head, and the gluey mass at last bubbled over him.

The watchers sighed, at once horrified and relieved. They looked again. The earth was pulsating like a living thing. The Jovians who, a moment before had been howling exultantly, were now wailing piteously. The ground was cracking up under their feet, and already some of them were being drawn into the sure death of the Jovian fluid.

Crimping and crackling, the circular waves moved outwards. The golden figures tottered and fell: the crazy staircase crumpled, and the ancient space flier began to rock. Then the surging nauseating mass oozed out of the cracked earth and lapped over the golden guardians. The Jovians sank struggling below the surface, and finally the last vane of Ignace Pascal's monster ship disappeared into Jupiter's maw.

Jack seized Captain Drake's arm.

"Let's get back home," he said brokenly. "Make all the haste you can!"

There followed a voyage of disaster. Awed by the grisly fate of Martin, Captain Drake and his officers allowed their eagerness to get away from the red planet to stampede their judgment. They attempted to drive the *Asteroid* through the whirling storm-belt at a ridiculous pace.

The men were panicky. Even Jackthorpe himself, normally so calm, seemed to be swept away in the general agitation, and fell in readily with the men's foolhardy efforts to make haste at all costs. Every rivet and brace rattled as the huge ship was propelled outwards. More than once the tell-tale halo appeared to show that the outer envelope had become incandescent. Times beyond count, the space ship was taken from their control by the elements and twisted and twirled like a child's top. But every man aboard, from the owner to the cabin boy, had but one idea fixed in his mind—home—and each was prepared to take unprecedented risks to get there.

Despite their haste, the wind-belt seemed much wider than it had on their coming. According to their instruments they should have passed through the worst of it an hour ago, and still there was no sign of the tornadoes abating. The electroscopic plant determining their position from a proof plane actuated by the electromagnetic forces of outer space, showed them to be almost at Satel-

lite I, yet here they were still in the storm belt. Hours passed, and still the fight went on, the tempest howled, and the ship shook as if with ague. Panic unfettered seized the men. Some cursed. Some prayed. Then came a whisper. The whisper grew to an angry and excited babble. The babble to a chorus of loud bellows as the mob, now beside itself, poured into Jack's cabin.

"What do you want here? Get back to your posts!"

"It's those things," cried one big fellow. "Everyone knows they're hoodoo. They've put a spell on the ship!" and he jerked a dirty thumb towards the "Planets", reposing on a side table.

CHAPTER V

The Return to Earth

● An angry approving murmur passed round the men.

"Hand them over, and let us chuck them overboard!" cried a rough voice. "We'll never be saved else."

Jack shook his head and would have spoken. But he might as well have tried to keep back the tide. The men surged forward, and unceremoniously seized the trinkets, carrying them aft. Jackthorpe thought of the thought machines, but they were too far off. The men, risking a flooding of the dense Jovian atmosphere, were already wrestling with the valve-ports.

Jack, seeking some way out, cast a glance at the instruments, separated from his cabin only by a vitreous partition. He gave a shout that brought the crazed men running towards him. The space compass had whirled round. The positionmeter vibrated violently, then its needle rested unshakably on a spot that showed clearly they were still in the very midst of the tempestuous envelope.

"It *is* the planets," he cried.

"Yes," shouted the sailors. "Overboard with them!"

Jack laughed. "Keep them where they are, and we'll have no further trouble. Science not superstition accounts for the trouble. When I pinched them, they lay on a magnetic altar, and have become highly charged. What a fool I was to leave them so near our delicate instruments. They have played the devil with the electroscopic planet, and we've been like the old sailor who glued the compass wrong way round, and landed at Iceland instead of Spain."

Some of the men laughed at the sally, but there were dark looks and sullen faces. The education of the working classes was plain rather than ornamental, and static electricity was a closed book to many of them. Supernatural causes seemed a much more likely explanation. When a new course had been determined, and when, after quite a brief spell the quiet of outer space was reached, even the most panicky was reassured. From abysmal pessimism, the crew traveled to giddy optimism like lightning.

But Jack had had a warning. He placed the "Platinum Planets" in the hold strongroom, and locked it with a new combination. The men were holding a "sing-song" with characteristic cacophony and a new-found zest, when Captain Drake entered Jack's cabin gravely.

"Who's funeral?" demanded Jack flippantly.

"Ours!" he answered laconically without smiling. Then he added: "We've sprung a leak. Where, Lord knows. Our engineers have searched the ship from stem to stern, but we can't find a crack. Yet we're having the deuce of a job to keep up the atmospheric pressure, and a reasonable temperature. Our hot air is escaping into the vacuum without in some way , but I can't find a sign of a hole."

"Loose rivets perhaps?" suggested Jack. "The ship got a terrible buffeting in the storm-belt."

Drake shook his head. "Been over every darned rivet in the ship. Everything is as sound as a bell, but fifty cubic feet of air at normal temperature and pressure are escaping every hour. Unless we can stop the leak, we can never reach Earth."

"No," said Jack keenly, as the full gravity of the situation came to him. "And every hour is making things worse. We are losing heat as well and, as the air becomes colder, an equal weight of it occupies less volume, so we shall lose more and more each hour until we suffocate, if we don't freeze first. Keep up the temperature as much as possible, and redouble the search."

Loath as they were to alarm the crew, every hand was pressed into the search. Every bolt and rivet, the seatings of the port valves, the double-lining plates of the structure were examined and re-examined, but all to no purpose. The leakages continued steadily. So long as the temperature was kept constant, the rate of leakage remained constant, but a drop of a few degrees resulted in a greater weight of air being lost.

The facts had not been made known to the crew, who had been led to understand that the inspection was a precautionary one rendered advisable by the storm buffeting. But somehow the true story leaked out almost as mysteriously as the uncanny leak itself and, once more bewildered, the men fell back on their old superstitious fears.

"Reduce the pressure five inches," commanded Jack.

"But . . ."

"It's our only hope. That, and keeping the temperature as high as we can. Perhaps we can circle into Mars' orbit."

Drake shook his head. "Impossible. She's approaching us. Our only chance is to hold out until we can reach the Earth in the normal way."

The effect of the lowered pressure was to cause the already despondent crew to be plunged still further into a depression. The walls of the ship ran damp. The sailors fingered weapons and muttered darkly. They searched here and there for the "Planets" and, not finding them, attempted to blast open the strong room. Crazed with fear and hopelessness, they once more besieged Jack's cabin with murderous intent.

Jack and Captain Drake, kept going in the low pressure by powerful stimulants, were examining the outer shell of the ship with ultra-powerful lenses. Under the very highest powers, the *selalumagnum* plate surface of the shell, which should have been bright and polished, showed dull, rugged and pitted. A dense network of exceedingly fine lines appeared.

"What's the breadth of these lines?" asked Jackthorpe.

Drake consulted his micrometer. "About one twenty-millionth of a centimetre."

"As I thought," said Jack, smiling grimly. "Our trouble is *diffusion*. When our ship heated up by friction in the Jovian atmosphere, the *selalumagnum* shell underwent chemical change, and instead of the tough impermeable envelope which once encased us, we are now

only held back from the outer vacuum by a spongy porous shell."

"But these cracks are miscroscopic. Nothing can pass through them," protested Drake.

"In the ordinary sense no, but gases may *diffuse* through them into the vacuum without. These tiny cracks are large compared with nitrogen or oxygen molecules with diameters a hundredth of a millionth of a centimeter. In the Jovian air, we did not notice it, because as our molecules passed out, others from the outer air passed in. But now there is no interchange, and our precious air is pouring through these countless cracks, these 'one-way' streets."

"What can we do?" asked Drake practically.

"Got any paint or varnish? Very well, get the men on painting the interior."

"What, the whole ship!" exclaimed Drake aghast.

"Every foot we cover means a reduction of the leak. Get to it!"

It was easy to say, 'get to it', but the men were surging round the cabin somewhat lazily, yet brandishing all manner of strange weapons, and angrily demanding once more that the "Platinum Planets" be dumped. After several attempts to reason with them, Jack slung the thought-projector into position, and ordered Drake to release extra air pressure. The added pressure acted magically. In place of the languid despondency, they assumed an alertness. But it was a hostile alertness, and they proceeded to hack at the vitreous partition separating Jackthorpe and the captain from them. As Jack worked the projector, they halted, looked extremely foolish for a second or two, then dropped their weapons, and stood attentive while Jack explained the situation. They then scurried to the mighty task of varnishing the interior of the ship.

It was soon evident to Jack that, helpful though the operation might be, they would be extremely fortunate to be able to patch up and reach Earth. When the pressure was high, the men worked fast, but he could not afford to waste so much air. And when the pressure was reduced they became languid. Worse still, although he could dissipate their superstitious fears while operating the projector, these fears returned more intensely than ever when the men got beyond its beams. And, as the work continued to become more hopeless, it was soon evident that the supply of covering material was bound to run short before half the ship was finished. The influence of the projector waned more and more.

● The ship was still a week's journey from Earth when Drake announced to Jack that the last battery of liquid air flasks had been started. It had been difficult for the past twenty-four hours to get the men to work at all, so hopeless had their task seemed, and so low had the air pressure become. They had gathered aft in little groups, surly and rebellious, cursing the hoodoo trinkets. The air from the decompressor had been released to help, and the rescued Jovian youth lay gasping and gurgling for breath in the rarified atmosphere of the space ship.

The vessel was growing cold. As much of the liquid fuel as could be spared from the rockets had been used to warm the ship. Now there seemed nothing to do but to wait for death, cold and airless death. Through the ports, the earth shone beckoning, like a star, set brilliantly on the dull black expanse; as if to mock the doomed men.

The air was going fast now, although Jack had taken charge of the battery and was throttling down the cylinders as much as he dared, for the temperature was falling a degree a minute. The men for the most part slumped to the deck, gasping and choking. Drake lolled opposite, his face a livid purple, and his hands blue with cold. The blood was spurting and congealing as it spurted from the young Jovian's ears and nose, and Jack's right hand remained frozen hard to the cylinder valve. The man nearest him spat languidly, the liquid freezing immediately.

As in a dream, Jack noted the man's action. Then, with a start, its significance dawned on him. With a mighty effort he wrenched his hand from the cylinder valve. There was one chance. The rocket tubes were water-cooled. If he could spray the interior of the vessel with the water from them and their supply tank, an impervious layer of ice would form immediately, and further diffusion would be arrested.

Breaking vials of sal-volatile he secured the attention of Drake and a few of the crew and they pumped a stream of the warm water around the sides of the ship, a sheet of ice forming, as Jack had anticipated. With a cry of exultation, Jack turned on the cylinder valves full-cock, and they breathed in the life-giving air greedily.

How the Government Survey Ship *Moonmaiden II*, almost a week later, sighted the *Asteroid* with burnt-out rocket tubes, clean out of control, the entire crew in a frozen coma, dashing headlong towards Earth; and how by masterly spacemanship, the *Moonmaiden* captain secured the derelict and brought her safely to Earth is a tale that every schoolboy knows by heart. The adventurers were gradually nursed back to health; and they separated, a little older, wiser and richer for the experience.

CHAPTER VI

Into Space Again!

● The horrors which had attended the securing of the "Platinum Planets" successfully precluded even such a hard-boiled adventurer as Jackthorpe from going straightway in search of the ninth statuette, the symbol of Earth called "Slaughter." For a year or two he settled down to supervise Bunch's schooling, presented prizes at baby shows, and talked a lot of bosh to a parcel of fools at election time in quite the approved manner.

Not that he had altogether given up the idea of securing the ninth planet to complete the group. He preferred to toy with the idea, to the accompaniment of a choice Havana, rather than to get down to brass tacks and hardships. The young Jovian thrived on Earth, and soon picked up a useful line of modern slang, following Jack about with the devotion of a dog.

Soon, however, the old wanderlust returned, and he combed the Earth from end to end in search of "Slaughter." Pascal would certainly have left the Earth piece on the Earth. But where? From Grant Land to Graham Land, from Cape Agulhas to Spitzbergen, from the Bass Strait to Kamchatka, Jack traversed and re-traversed the earth. His agents hunted up historical rec-

ords in every library in the world: he even took a trip to the moon, on the offchance that Pascal had considered the satellite a suitable site for the earth piece. But all to no avail. There was not even the smell of a clue. The more impossible the task appeared, the more was Jackthorpe's desire whetted. The thing became an obsession. He dreamed of the ninth piece, he could not eat for thinking of it. He lived for it, and as year succeeded year, and yet no trace of the statuette was forthcoming, he lost interest in everything else. He became a veritable hermit, tinkering all day, and half the night, in his library and laboratory, always seeking a solution, scientific or historical.

"Jumping Cobras!" exclaimed Bunch, one night, as lightheartedly he bounced into the library. "You look like a ghost, old bean. Why not give up the whole lot of rot?"

Jack turned his sleepless eyes towards his younger brother, who had grown to comely manhood, and was promising to be as brilliant in surgery as Jack had proved in adventure. "You don't understand. I'd give anything to possess it. *I must. I must!*"

"You'll possess a nice straitjacket, if you go on much longer like this," announced Bunch, half banteringly, half seriously. "But, if you want to know where Pascal hid the treasure, *why not ask him?*" and he jerked his thumb in the direction of the golden figure of the old explorer-crank, which stood, like a living being, in the alcove, surrounded by the "Platinum Planets."

"*You* are the padded cell candidate, not me," said Jack testily.

"No," protested Bunch. "I'm serious. Even our prehistoric surgeons knew that tissue from a dead animal could be kept alive indefinitely provided suitable nourishment was supplied. Later, of course we found that provided decomposition was entirely arrested, such tissue could be kept in a state of suspended animation over long periods without nourishment, and could be enlivened whenever desired by proper nourishment. The next step concerns Pascal. We have every evidence that the Jovian method of body-planting, or some incidental embalming process effectually prevents decomposition."

"Very entertaining," commented the elder brother wearily, but of what use is all this to us?"

"Throttle down, old bean, throttle down. Our professor, Michelson 16/5, has invented a modification of the standard thought projectors and receivers, and has already had many successes in operating on the brains of dead men."

"You mean," shouted Jack excitedly, "that he could probe in old Pascal's brain which has been dead for centuries?"

Bunch nodded.

"Then let's get him quickly."

It was a weird scene that was enacted in Dr. Michelson's laboratory. The golden corpse of the long dead explorer lay on his operating table. A giant thought-projector with solar-vacuum tubes stood at one side, and a similar receiver at the other. For days the professor had supplied suitable nourishment to the brain-tissue.

Michelson made an incision in the golden plate, encasing Pascal's brain, and attached the terminals of his sensitive apparatus at a point below the plane of the *sensorium cerebelli*. He completed the circuit, and switched on the current. A faintly pink light glowed in the tubes, gradually turning to a sickly green. Michelson rubbed his hands.

"We haf success, I tink, no, yes?"

● What he meant, the others had not the slightest idea, but their hearts beat faster.

"Tink ze tinks you wish," commanded the doctor, handing Jack the headphones of the projector. Jack adjusted the cumbersome apparatus, and thought deeply about the ninth planet, while Michelson fussed around Bunch, fixing the corresponding headphones of the receiver on the youth's head.

For a time the sensations received by Bunch were a mere blur, then he made out some dim shadowy figures, which became clearer and clearer as time passed. Finally they moved. They *lived*. They acted before his mind's eye a drama which had taken place centuries before, a drama of greed and disaster.

"Well?" queried Jack, as Bunch held up a hand to denote that he had sensed enough.

"You'll never recover the ninth piece," said Bunch. "It's in old Pascal's liner, as were the others, and you know the ship is in old man Jove's interior now."

"But how? His object was to return the pieces to their own planets, and "Slaughter" was the *earth* piece. How came it on Jupiter?"

"Just human greed. Old Pascal was especially frightened of the evil influence of 'Slaughter', the statuette being fashioned from human bone. So he handed it over to his priest to bury it in a lunar desert. Knowing the value of the trinket, the priest faked the burial, and smuggled the piece into the liner again. To that Pascal attributes the terrible disasters which befell the ship, culminating in the slaughter of the crew sacrificially by the Jovians.

"Just before he died, the priest confessed his crime, and told Pascal who, like the others, was bound for sacrifice, that it was hidden in the panelled walls of the space liner. So you see, old bean, you'll have to content yourself with *eight* pieces, not *nine*."

But Jack pursed his lips grimly.

"We shall see!" was all he said.

Jack had had the *Asteroid* completely refitted from stem to stern. The most eminent chemists in the land had inspected the porous shell, and it had been plated and double-lined in such a manner that whatever friction it might be exposed to, no reoccurence of the diffusion phenomenon could eventuate. The cabins had been even more luxuriously appointed. More powerful engines, safer braking mechanism, more up-to-date air flasks, and the last word in scientific instruments had been installed. In a word, the ship was the *dernier cri* in speed, comfort and efficiency.

He soon had a plan of action. He determined to do nothing less than raise Pascal's space flyer bodily out of the tacky Jovian fluid. The apparatus he assembled was modelled after that used for raising sunken submarines. He proposed to render the ship air-tight, if it had not sunk too low, then to compress the Jovian gases and pump the ship full of them. This would drive the sticky fluid out of the ship through a small aperture, just as submarine engineers do with compressed air to release the sea-water. As the ship filled with gas, it would lighten and gradually rise to the surface.

Everything was soon in order, and an advertisement broadcast for a crew. Despite the high wages offered, no space-faring men appeared in answer. On the second night, Jack repeated the broadcast, doubling the previous offer, and having pictures of the reconditioned *Asteroid* transmitted via the International Televisor, but still there was no reply.

On the fourth day, Captain Drake appeared.

"It's no use," pronounced the veteran. "She's known as a 'hoodoo' from Pluto to Mercury, and you won't get a solitary spaceman to risk his carcass on her, if you offer all the Incas' treasure. They're a clannish lot, these spacemen. The history of the *Asteroid's* last trip, and the spell put on her by the "Platinum Planets' is a byword over the whole solar system."

● Jack flicked his cigarette. "Bosh!"

"It may be bosh," answered Drake, "but it puts the kibosh on the expedition—at any rate, in the *Asteroid*. Of course, I'm not superstitious myself, but, well—I never walk under ladders, *just in case*—you know. So, if you're determined to sail the *Asteroid*, you'll have to get another captain!"

Jack argued and cajoled, but all to no purpose. Drake was adamant. He would *not* sail and, if he would, of what use was a captain without a crew?

"Take the damn ship to the brokers," said Jack irritably at last, "and sell it for scrap. This thing's getting on my nerves. Then ring up the Interplanetary Transport Co., and charter a special. It'll be a poor kind of tortoise compared with the *Asteroid*, but I suppose it'll have to do."

"Yes," cried Bunch excitedly, "we can get off within a week. Oh, boy, won't it be swell?"

Jack eyed his younger brother coldly. "There is no 'we' about it. *I* am going. *You* are *not*."

"I say, Jack, I . . . like that! First chance I have of a bit of adventure, and you stop my going."

Jack waved his hand angrily. "I'm taking Jacko, (the young Jovian). He may be useful. You wouldn't. It's not a k . . . ."

"Oh, I know that little piece myself now," interrupted Bunch disgustedly. "It's . . not . . a . .kid's . . game . . and . . wait . . till . . you . . grow! Hang it all, man, can't you see I *have* grown? I'm two inches taller than you!"

Bunch's pleadings were all to no purpose. His elder brother might hardly be his old self—the years of searching had ragged his nerves—but he had still his uncompromising will. When he said a thing, he stuck to it, if the heavens fell, so before the week was out he had sailed into space, leaving Bunch disconsolate behind.

The chartered special had been christened *Heart's Delight*, by the poetically inclined transport directors, but the spacemen called her the 'Space Pig', a less euphonious, but more accurate description. She lumbered heavily along, admittedly overloaded by the heavy lifting gear destined to raise Pascal's liner; had to be laid up at the Martian repair depot for a couple of weeks; and generally behaved well up to her nickname. In the Jovian tempestuous belt she was well-nigh unmanageable, and Jack's nerves, already frayed, were strained almost to breaking point. He began to lose sleep.

The smallest thing would send him into a choler. His sense of proportion vanished. He had one fixed idea to possess the ninth "planet" by hook or by crook.

At long last they penetrated the wind belt, and navigated the "pig" round to the site of Pascal's buried liner. As they descended, Jack glanced through the floor port. He rubbed his eyes. Had, then, his senses left him? He pinched himself. There, below, on the rapidly enlarging landscape, lit by the erupting volcano, Pascal's liner floated easily on the sea of "pitch."

The first shock over, the explanation seemed simple. The reaction from the *Asteroid's* rocket had caused the ship to be sucked down, as they had seen. But it had remained air-tight and, when the disturbance subsided, had come to the surface again.

"So much less work for us," thought Jack, and straightway he began to give instructions as to the building of a raft-bridge across the semi-fluid surface.

The work proceeded fast, and in a few hours Jack was able to enter the liner. As he drew near, he noted with some misgiving the unmistakable marks of grappling irons on the hull. Jacko accompanied him. He was the only man who could proceed without the Pilling suits and rocket boots.

As they neared the door, Jacko whined in fear, pointing to an improvised "bridge" of brushwood coming from the opposite direction. It was clear the Jovian feared that this had been built by the priests, from whom he had so narrowly escaped, and that, once more, they had taken up residence within the liner.

Jack drew his ray tube. Then he noticed, lying on the staircase, an oxy-acetylene cutting tool. His heart sank. Someone had stolen a march on him. No Jovian had used such a tool. Excitedly he entered, with Jacko clinging close. The ship was empty, but it was ankle deep in the clinging mud, while the walls dripped slowly the same treacly mass. Obviously, the ship had but recently come to the surface.

CHAPTER VII

Murder!

● With heart thumping and stomach falling, Jack made his way to the place in the panelled wall, where Pascal had indicated the statuette was hidden. He gave a dismayed shout. The panel had been blasted away at the precise spot, and there, instead of "Slaughter" was the ensign "Namur," a notorious space rover.

As fast as he could, Jack retraced his steps to the brushwood track. The track, he saw, carried over a low dune to the right, and despite Jacko's restraining arm, he would have followed the track into the rover's nest beyond, had not a whirring come to his eyes from above. He raised his eyes. A giant space-liner was sailing easily above them. It was Namur!

Jack fairly flew to the "Space-pig." He would fight the pirate. Oh, that he had the *Asteroid* instead of this flying pig! Ray tubes were put into order, and a large rocket discharged. But the pirate had other ideas. He darted gracefully upwards, and kept on going. Jack darted upwards too, as gracefully as one can expect a "pig" to move, and kept on after him. Half a dozen times, Jack nearly lost track of the pirate ship as they fought through

the wind belt, but by sheer doggedness he kept the "Space Pig" at the other's heels.

Followed an epic chase. Grunting like its prototype, the pig wallowed after its prey. The pirate showed no tendency to fight, but seemed to take a delight in tantalizing the "pig", allowing her almost to reach ray range, and then putting on phenomenal speed and leaving her like a swallow leaving a slug. It goaded Jack to distraction.

He sighed, a hundred times a day, for the *Asteroid*. It was soon evident that the pirate was intending to curl into the Mar's orbit. Jack consulted his instruments. The Mars-Earth mail ship was almost due. That was the pirate's lay, to attack the mail ship!

Whatever Jack did, he could not increase his ship's speed beyond a pig's pace. Day after day the pirate ship drew steadily ahead. Presently through their instruments, they saw the pirate draw in his ensign, and make straight into the path of the mail-boat. As the latter drew near, Namur veered round, and sailed parallel to the postal flier. A communicating tube shot out between the two boats.

Jack thrust forward the "Space-pig" recklessly in an endeavor to assist the mail-ship, but all to no purpose. Long before he was within hailing distance, the mail-ship was on its way again, no doubt in charge of Namur's minions. The pirate ship hovered leisurely behind, as though to await the attentions of the "Space-pig."

As soon as he got within range, Jack played his devastating rays on the ship. The pirate's liner shone with a blue haze for a moment, but there was no disintegration, as he had anticipated. Nor did Namur reply in kind.

"It's uncanny," said Jack. "Either we've been loaded up with dud ray-generators, or else Namur has secured our patent insulator which we fitted to the *Asteroid*."

Drake smiled grimly. "I've been watching her ever since she set out. She *is* the *Asteroid*."

"Lord, what a fool I was to scrap her!" said Jack beside himself. "Namur has read the whole case, snapped up the ship, manned it with his minions and robots, and beat me at my own game. Well, we'll negotiate with him. I'd give half the world for 'Slaughter!' "

"We'd better beat it, while the going's good," counselled Drake. "This hulk's a swine, and Namur's ruthless. Besides, you've got a touch of space-fever. You'd better get to bed."

But Jack turned a deaf ear. His mouth was parched, his eyes were hot and dry and he could hardly hold up his throbbing head. But, he asked himself, was he to give up the seal of his life's work for a comic opera pirate and a headache?

● The pirate ship was coasting along at an easy hundred miles a minute, and even the slow going "Space-pig" had little difficulty in overtaking her. Soon they were bow to bow, mutual attraction holding them tightly together, the pirate offering not the slightest resistance. Efforts were made immediately to open up communication, but not the slightest reply was vouchsafed.

"Queer," commented Drake. "Perhaps the mail-ship crew overpowered them, and left the *Asteroid* derelict."

"It's a chance," cried Jack, his eyes shining feverishly. "Sling the companion tube through. I'm going aboard."

Protest was useless. In spite of the fever's spate, Jack was as impetuous as ever. He cursed the men impatiently while communication was being made between the two ships, then lurched unsteadily through the opening. Jacko would have followed him, but he "barked" him back fiercely, and stumbled into the pirate ship alone. The *Asteroid* was just as he had fitted it, but it was illumed with a weird green glow. At first he could see no one. Then, in the dim light he made out the figure of a man with a strange metallic face, then another and another, standing motionless. Namur's robots!

"Take me to your master," he jerked out. Instantly two of the robots with mechanical steps arranged themselves on either side of him, a third bringing up the rear.

The mechanical men moved forward by a kind of link motion, and Jack dragged his fever-tortured limbs in the same direction. Presently, they halted before his own cabin of yore. The door opened, and he was gently thrust forward into the room.

The cabin was lighted with the same ghostly glow. A heavy curtain partitioned off a segment of the room on the far side. He stood for a moment listening. The robots turned and jerked out of the room, the door closing behind them. He took a step forward. A voice came from behind the curtain.

"Qui va là?"

"It's me, Jackthorpe R/43," stammered Jack, and his voice sounded harsh and cracked, even to himself, as he held on to the table to steady his shaking limbs. "Sell me 'Slaughter' and I'll give you a million."

A soft laugh was the only reply from behind the curtain.

"Two millions?"

"Mais non!"

"Five millions! Ten! Listen, I'll give you half my radium fields!"

Again that soft mocking laugh of denial.

"All my radium fields, then, you Shylock!"

"Mais non," again came the laughing reply, and then, in tones of finality, the words, *"Bon nuit!"*

Mad with covetousness and fever, Jackthorpe went berserk. He could see the bulge of the man's body against the curtain. In a trice he had lifted a heavy microscope stand. With both hands, he raised it above his head, and crashed it against the figure outlined on the cloth. He heard the thud of the body as it fell to the ground. With hands that were trembling from more than space ague, he drew aside the curtain, and stepped over the body. In the green glare, he searched here, there, and everywhere for what he sought. But it was not to be found.

There were dinosaurs' teeth, and coral amulets, little wooden gods and uncut garnets, pterodactyl skins and incense burners. But the ninth piece of the "Platinum Planets" was nowhere to be seen. In his desperation, he tore up the flooring, but all to no purpose. Finally, worn out by his exertions and the fire burning within him, Jack collapsed weakly on the ground.

He was lying on something warm and soft. His hand felt wet and slimy. Ah yes, he remembered now. He had murdered a man! Murder! That was what the old legend said, the nine "planets" could never be collected without a murder. But, where was the piece? The fates had tricked him. He had done the murder, but they were withholding his reward!

(*Continued on page* 279)

(Illustration by Paul)

Then a strange thing happened. A piece of iron struck the fly wheel. The resulting shock startled Sam Bell, who released the lever. Berlin was once more protected.

IN THE YEAR 8000

By OTFRID VON HANSTEIN

Translated from the German by
Laurence Manning and Konrad Schmidt

● Bela was sitting, trembling, in the house. What would happen next? Would the other machines now learn of the death of their companion and attack the buildings in revenge? She ate no dinner that night, for fear of the serving robot. Nothing could have persuaded her to go into the kitchen, where there were so many arms and levers. She spent the night fully dressed and wide awake, ready at any moment to flee into the jungle when the great attack should commence. But nothing happened. At least she heard the shrill sirens announce the new day. She rose and peered cautiously out-of-doors. The great machines moved ponderously on their usual routes, indifferent to everything but their immediate duty. She laughed.

"Just like people! Nobody mourns the dead."

With the customary mechanical smile, the servant machine presented her breakfast. Yet, was it the same smile? Did it not seem as if some hidden meaning could be read in it this morning? Perhaps the morning chocolate was poisoned! But she had already drank it! She watched for symptoms of poisoning half credulously. Then she pulled herself together and stepped outside. There lay the collapsed "bull." It looked at least to her like what it really was—a badly damaged conglomeration of steel shovels, gears and wheels. She sent the alarm to the mechanical department, boarded her car and set out for the control station as usual.

●

WHAT HAS GONE BEFORE

In the year 8000 all of the cities of the earth except Berlin are underground, due to destructive downpours of meteors that strike the earth. The people are emotionless, and are either mechanical breeders of children or workers. Emotion has been forgotten. Grando Blanco a young engineer is engaged in driving a shaft deep into the earth to be used for transportation between continents. His cousin Bela Wilson is secretly in love with him. Bela must choose between being a Mother or a Knabina worker. Being a throwback to a more emotional age, she wants love. Her uncle gives her work supervising a mechanical farm uninhabited by any other human beings, and here Bela is frightened by the mechanical monsters that she must deal with.

Meanwhile there is bad blood between the Blanco, or white race and the Nigro, or black race and the Asiatics. San Bell, a negro employed by the whites, comes to the emperor of Africa and promises to overthrow the whites. During a meteor fall over Berlin he will discontinue the current that raises a protective barrier over the city and allow millions to go to their death.

Near Berlin, in a cave, is a Doctor Werner, who still believes in the importance of emotions in human life. He has been engaged in transplanting limbs and organs from destroyed human bodies, and so making new bodies.

● In the second part of this tremendous story of the distant future, we will see dangerous and epoch-making projects of the human race under way. Below the earth lies the mysterious unknown. Above, from the heavens is the always-present danger from meteors. Lurking in the background is the curious race hatred brewing plots and new wars on three continents, for the destruction of millions.

These are the dangers that our emotionless people of the year 8000 must face. We may know how we of the hectic 20th century might face them. But how will people without love or fear meet the menace from both the skies and the depths of the earth?

Herr von Hanstein will tell us, as this story progresses to its powerful climax.

Everything was different today. She was still unable to overcome the feeling that she was surrounded by enemies. Even the grandeur of Nature before her was somehow frightening. Toward midday, a new noise struck her ears. Looking up she perceived an entire squadron of space ships slowly approaching. They finally stopped just above her. A small vehicle descended upon a parachute and landed close to her station. A man stepped out and came up to her.

"My name is Jack Sontro. Is Sinjoro Wilson in the Central?" He spoke curtly and clearly.

"Sinjoro Wilson is away."

"May I ask who you are?"

"Bela Wilson."

"Here is a letter for you, then. We have come to take in the crop. I'll be back later and take your answer to the letter, if you wish to make one."

The quiet farm was transformed into a scene of great activity. The space ships descended to within a few feet of the ground. Great hose-like funnels were let down into the store-houses, where the cacao, cotton, wheat, etc., were collected—automatically stored there by machines. Up the funnels, thousands of tons were sucked in a short time into the holds of the ships. Bela gazed in awe for a while. Then she thought of the letter. It read:

> "The probation period is over. You must now decide whether you wish to retain your position on the farm permanently. If not, you have two alternatives: you will either be assigned as Knabina to the newly-created department of Grando Blanco, and will report to him at once for instructions; or else you must report within three

days at the Motherhood Institute in New York to Sinjoro Lopez.

The Supervisor."

● Sinjoro Lopez! Was that not the bestial person she had seen in her father's office? Never! To remain here with these terrible machines? She shivered at the thought. Then a smile appeared on her countenance. Knabina in Grando Blanco's department? Of whom else had she been thinking for weeks? Had he requested her for the assignment? Why not? How else could it have happened that she was particularly assigned to his work? There was nothing to decide. She would go to him.

Jack Sontro reported again after two hours.

"And what is your answer?" He saw in her nothing but another Knabina—an inferior being, tolerated only for her usefulness.

"I desire to be assigned to the department of Sinjoro Grando Blanco."

"When does Sinjoro Wilson plan to return?"

"Tonight."

Bela was glad she would not have to explain her decision to her uncle. She could not have avoided mentioning the affair of the night before, and he would certainly have made fun of her.

Jack Sontro nodded.

"You had better return at once to Central; leave a report for Sinjoro Wilson and get your things together. In half an hour, the space ship will leave. Please don't cause any delay."

The swift little car brought her back to the buildings. There was little to prepare for her voyage to Europe. After dictating a phonographic report for John Wilson, she returned to the control station, near which floated the vessel.

"High time! Get inside."

She had hardly had time to think in those few minutes. And now the space ship was already on its way. With one last glance, she embraced the departing landscape. She felt sad to leave it. What a paradise it could have been! If only one understanding soul had been her companion! But before this thought was complete, everything disappeared from view.

* * * *

The space ship descended again. Mountains and valleys emerged from the monotonous clouds beneath and finally the vessel made fast to the great mooring-mast of the Brocken airdrome.

"Take this car. It will get you to your destination in three minutes."

The narrow valley at which she arrived was tremendously confusing, for untold numbers of outlandish machines created a deafening din. Bela could hardly breathe in the damp, close atmosphere. She stood, in front of a low building, face to face with Grando Blanco.

"Grando!" She could not express the jubilant welcome she felt.

Grando looked older and more serious than formerly. He gave her a fleeting glance. "Oh! Bela Wilson! You want to join my working force as Knabina? Well, let's try it. Sinjorina Wells over there will give you the necessary instructions." He seemed indifferent and unconcerned, and turned away in company with Ben Vintros.

It was fortunate that the working day had just ended, so Bela could hide her disappointment. Nobody noticed her in the dormitory, as she sat with her face in her hands.

CHAPTER V

The Foolish Prophet

● Lillian Wells had assigned Bela to her duties. It had not been an easy task, for Bela was really unfit for anything.

"Can you make an astronomical observation? Do you know how to register from a telescope?"

"I have no idea."

"But have you perhaps a knowledge of chemistry?"

"Nor that, either."

"Why—haven't you been at the Knabina Training Institute?"

"I was intended for a different career."

This woman with the masculine body glanced significantly down Bela's figure.

"Perhaps that would have been better for you."

"I should have never—!" Bela's eyes flashed, but she bit off her words. She did not care to reveal her thoughts to this sexless worker.

Lillian Wells misunderstood her emphatic objection and showed, for the first time, a friendly smile.

"You are right! They are a subordinate class of women. Animals! We thinking women aim to cease being creatures of passion and birth and to become individuals equal, if not superior, to men. At least, I must give you credit for your attitude. But tell me—what kind of work *can* you do?"

"For the last month, I have been operating the central control station on the farm *Santa Machina*."

"And why didn't you stay there?"

"Frankly speaking, I was afraid to be alone with the machines—they seemed almost thinking creatures!"

A mocking smile played on Lillian's lips.

"Simply because you did not understand machinery. I will put you in the department where they make the huge earth-shovels. Once you see such a monster constructed, everything will seem different."

Everything was so highly specialized and human labor reduced to such a minimum, that even Bela found a sphere of useful activity. Her new duties required her to spend eight hours a day at an automatic control similar to that at *Santa Machina*. The difference was that now she assembled machines, instead of supervising their operation. Before her, beneath a glass cover, lay replicas in miniature of all the parts which lay outside ready for assembly. Beside her was a talking machine which explained the entire process of construction.

"Beam number one to be welded to beam number seven."

Bela pushed several buttons and observed how a magnet pressed the two miniature beams together.

"Now the welding point," commanded the mechanical instructor.

She pushed the proper button and the automatic apparatus did its work.

"Derricks for lifting the joined beams."

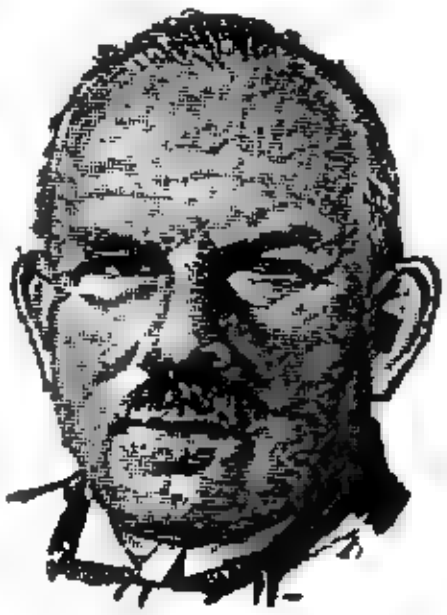
Bela manipulated the controls and a derrick lifted the

beams into their places in the base of the shovel being assembled.

"Bring in beam number eight."

The phonograph, of course, was only used for training a new Knabina. While its voice rang out, Bela had to concentrate intensively on her work and could not for a moment take her mind off what she was doing, at the risk of spoiling the entire structure.

During the first day Lillian Wells, superintendent of Knabinas, stood behind her nearly all the time. Bela could feel her keen glance. The room in which she worked was of oblong shape. Throughout the room were set tables similar to Bela's with a Knabina in front of each, operating the controls. These were somewhat similar to the keyboard of a typewriter. Bela felt that these Knabinas did not like her.



Otfrid Von Hanstein

She was young and attractive in a feminine way. They had given all that up when they undertook to prepare for their careers. How learned they all were! They manipulated all sorts of machines which Bela did not even know by name. They seldom spoke. But when they did speak, they referred to problems which did not even interest her mind. Thought machines were forbidden during working hours. Bela felt ignorant and inferior when comparing herself with her coworkers. Yet, at times, this would seem all wrong and she felt pity for them. She was, after all, the only true woman there.

Now and then, Grando Blanco passed quickly through the room. He stopped occasionally to have some concise and brief conversation with Lillian Wells—giving orders or perhaps commenting on the work in hand. Bela would look shyly at him, thinking how handsome and manly he was. Was it possible that he did not see her at all? Did no feminine charm appeal to him?

After working hours, life went on almost the same as in the cities. Great numbers of airships had been provided to carry the workers to remote recreation centers. But Grando Blanco had put a stop to this. The lunar observatories had predicted cataclysmic falls of meteoric matter. Grando did not want to risk any delay by the possibility of a number of his workers being killed. Athletic fields had been established in the construction camp where the men and Knabinas pursued all sorts of sports. In their scant clothes, their brown sun-burned bodies gave them the appearance of savages. Sport was no longer the wholesome healthy amusement of earlier days, but an everlasting and very serious attempt to achieve new records. Bela, on the advice of Lillian Wells, put on a sport dress and joined them. She was a little embarrassed in her revealing costume, among all these lean and sexless Knabinas.

One day Grando was there. How handsome his slim brown body looked! His eye sparkled as he threw the heavy hammer farther than anyone else present. He noticed Bela and came up to her. Playfully, he felt her arm to test her biceps.

"Training! Do you call that muscle? You are positively fat! You need training and exercise. Look at Edith Vintros. Here is almost a man's body. She has strength and energy and will-power. Yet she looked just like you when she came to us at your age."

Bela felt a flash of jealousy. But then she did look at Edith Vintros. There was nothing feminine about her any longer. She looked at herself in the mirror that evening. The looking-glass was no longer an indispensable of toilet, but standard gymnasium equipment. Vanity was still alive, but it centered on strength and efficiency rather than appearance. The flaming ambition of all workers was to contribute in some way to the mastery of nature.

It was a beautiful evening. Bela was tired and felt no desire to be trained by Lillian Wells and made fun of by the other Knabinas. She had hurried away right after work—even foregoing dinner, which was served in the camp cafeteria from the central kitchens. She took a walk up the forest-covered mountainside, which extended above the cavern into which Grando Blanco bored his tunnel deeper and deeper. She came to a little pavilion and entered. There were never any people here. In this materialistic age, no one had any interest in charming views. She sat down, looking out over the landscape. She felt desperate, as people do who cannot fit into their surroundings. The slopes of the Harts Mountains stretched before her. The huge old trees rustled their evensong, as though they wanted to tell the lovely girl that they too were sad. It was entirely beautiful. The last gleam of the sinking sun shone on the tree tops. Little pink clouds moved lazily in the sky.

● Bela was not the only sad person in the world. Will Gernhold had left Professor Werner's hospital after a hard day. The Professor had achieved a number of things lately. Only recently he had succeeded in implanting an eye, which he had kept alive for weeks in serum, into the face of a patient. He was now devoting his time to the greatest task of his life. He would try to transplant a living heart. He had not yet attained this on human beings, but proposed to do so. He had already succeeded in keeping hearts alive in serum and was just waiting an opportunity. Will Gernhold had left him brooding over this problem.

He was a dreamer. Slender and untrained physically, there was not in his eye that energy which fired Grando Blanco, for instance, to great deeds. Professor Werner, however, looked upon him with affection, for he understood his theories and sympathized. "If only he could find a mate for Gernhold!" he would say to himself. But at this point, he would shake his head sadly. Was Gernhold really the proper and fit man to found a new race—a race of feeling, friendly humans? They must be healthy and wholesome, as well, thought the professor and pursed his lips soberly as he eyed Will Gernhold's frail body. If he did find the right girl, might there not result a race of weaklings?

Will Gernhold walked rapidly up the slope of the mountain, for his heart was young and strong. He often came

to the little pavilion, but when he came to it and entered to be alone with his thoughts, he saw Bela Wilson. Her feminine charms were heightened under the pale light of the rising moon. Her eyes were large and dreamy. Will had never seen a girl like this before. He had no thought receiver with him, but he did not need one to tell him that he had found a kindred spirit.

"Is it not gorgeous up here?" he said in a low voice.

Bela was a trifle startled. Then she suspected the remark had been ironic, for she was accustomed to ridicule on sentimental matters. But when she looked into Will's eyes, she nodded.

"Yes it is beautiful—just as it was at *Santa Machina* when the machines had ceased work."

Will stared pensively at the view.

"Thousands of years ago a great poet said, 'The world is perfect everywhere except where man is.'"

Bela came to her feet, unconsciously.

"And with his ugly, cold, heartless machines."

These two young people felt like old companions, although they had never met before. Will looked at Bela in sudden revelation: Here she was! The girl he had sought—who could understand! A wave of happiness swept over him. Was this the love of which he had read in the Professor's ancient books? How beautiful she was! How utterly different from the other heartless Knabinas! And yet, she was not of the professional mother class—those unfeeling women who had degraded themselves by bearing the children of men they did not love. Providence—in whom people no longer believed—had brought this girl to him, he thought.

But Bela was unaware of the young man's emotions. She had no thought machine and could only judge him by his words, which had seemed mere commonplaces. Besides, she was thinking of Grando Blanco—and could not even have told what the man Will Gernhold looked like.

They sat side by side for a time in friendly conversation. Bela told him about *Santa Machina* and the fields and jungles around it. Then Will escorted her home through the darkness. In the hall of the dormitory she met Lillian Wells.

"Where have you been? I missed you at the spear-throwing."

The note of criticism coming so suddenly after her peaceful evening jarred on Bela's nerves.

"Do my duties include spear-throwing, even if I dislike it?"

"Not exactly, but . . ."

"I have been walking on the mountain."

"In the company of the Doctor's assistant?"

"Are Knabinas forbidden to speak to men?"

The question made Lillian indignant.

"I warn you! A Knabina who forgets herself -who . . ."

Bela stiffened. "I don't care to hear any more! I know how I have to behave. Perhaps I know more of feminine decency than you do!"

"Bela?"

"Instruct me in my enforced duties, but leave me to supervise my own private life. Yes, I have spoken to a man—spoken about things more worth while than spear-throwing. But I didn't even notice what he looked like—as a man, he did not interest me in the least."

"Why should such a thing interest a Knabina?"

"Good night."

Lillian Wells shook her head. This Bela Wilson was a rebel and they would have to get rid of her sooner or later.

* * * *

At about the same time, Will Gernhold was returning to the Professor's dwelling.

"Why, what has happened to you? You look as though you had just received good news."

With sparkling eyes, Will told him about his meeting with the young girl. The Professor listened attentively.

"I must make the acquaintance of this Bela Wilson," said the Professor.

For a month, the huge boring machines had been eating their way into the interior of the earth, deep down beneath Herman's Cave. The shaft had a diameter of over ten feet. A great cutting tool, the invention of Thom Alva, made in the form of a tube with same width as the shaft, rotated rapidly, rapidly as it sank into the rock. The tube was of hard metal and the cutting edge was covered with diamond chips. Under great pressure, the tool descended a yard a minute. When its core was filled with rock and earth, it was raised to be emptied and another cutting tube descended to take its place.

Grando Blanco and Ben Vintros stood in the cave at the entrance to the shaft. Like all workmen near the machines, their ears were plugged with cotton. Even thought transmission was impossible through the terrific din created by the boring machines. Oxygen helmets and complete diving suits were also a necessity, for the swirling clouds of dust penetrated everywhere in the cave, gleaming under the artificial sunlight.

Up above, on the surface, was a scene of great activity also, for the piles of rocks and earth from the excavation would have buried the valley were it not constantly being removed. To facilitate this removal, a steel belt filled an entire roadway for many miles bearing the rock far from the scene of digging. Every few days, an extra length of the moving belt was added as required. The surrounding country was used as one vast dumping-heap —whole valleys filled in with detritus.

Grando Blanco stood before his apparatus counting. Every hour, the cutting tool sank 175 feet farther into the earth. In three actual working days, two miles of depth was added. This did not satisfy Grando Blanco.

"We are going too slowly. As we are going now, we will not do 250 miles a year. It would take us twenty years to finish the shaft and we cannot afford that."

"Then we must construct a cutter that will descend seven feet a minute."

"Even so, it would require ten years."

"Well then, let's make it fourteen feet a minute."

The suggestion was almost insane—if such a term could be used in technical affairs of that age.

Ben Vintros was again brooding over plans. Between each two working shifts there was a rest period of one hour. This gave Grando, who permitted himself scarcely any rest, an opportunity to make inspection tours in the shaft. His elevator had the appearance of one of the cutting tubes, but its sides were fitted with heat-proof glass and it was equipped with powerful searchlights. In

it he descended to inspect the rocky walls. Whenever he found an area of softer stone, he ordered it to be blasted out. At regular intervals in niches thus created. he had set up a series of substations to house supplementary machinery.

Often subterranean rivers were discovered and these had to be filled with heavy metal plates. Usually these were small. but in a few cases quite large tunnels were opened; in such cases the water was evacuated by pumps and the space utilized for housing machinery or for providing sleeping quarters for workmen. Life was not pleasant in these cross galleries, especially at this time when the cutting tubes would race by filled with rock. The terrific air suction would pull a man into the main shaft if he were not careful. Even to stand at the end of the gallery and look down the shaft would have been certain death.

New cutters had been constructed, some seven feet in height. The power was lavishly applied. The deeper the shaft was driven, the softer became the rock. They were already about to start a new kind of cutter to work. These were slightly smaller in diameter and had an elastic outer shell of insulating and heat-resisting metal. This outer shell provided a sort of caisson, remaining in the shaft while the inner tool was removed with its load of rock.

Then a new cutting cylinder entered the old shell and bored it still deeper, at the same time the shaft above was reinforced with heat-resisting cylinders which descended as the cutting point prepared the way. At the end of the first month, the shaft was 47 miles in depth. By that time, a great chamber had been blasted on one side of the tunnel to act as a new center of operations and drive the shaft still deeper. During the installation of the machinery five days were lost. but on the other hand the rock was getting softer now and greater speeds were possible.

Grando Blanco, as the work progressed, remained down in the shaft a week at a time. Conditions were made livable by a forced-draft atmospheric conditioner and huge refrigerating apparatus.

* * * *

Bela spent her evenings at the pavilion on the mountain. Will Gernhold, however, was rarely in her company. Professor Werner had advised him to stay away.

"You must give her time. No matter what her nature is, don't forget that she has been brought up to believe in the customs of the present generation. Give her books if she knows how to read."

"She has read a number of books already."

"I will select some books for her."

So Bela read in the pavilion by the light of a pocket lamp, instead of spending her evenings at sports where the Knabinas would have made fun of her. She would read of by-gone days when there were still homes and families in the world—of happy children and loving parents. Her cheeks aflame with enthusiasm, she would think of Grando Blanco and wonder how she could convert him. If only he would read such a book for himself . . .

* * * *

A few miles from Halberstadt was one of the game fields Blanco had established for his workers. A valley had been filled with broken rock from the shaft and made into a level plain. Electricity had been installed in this field, making it possible to practice here those sports which Mr. Cook and his assistant Bob White in the city of Santa Scientia, centuries before, had developed. Racing automobiles could, by the push of a lever. be transformed into vehicles for air travel. Football players would be thrown miles by electric current. The greatly amplified muscles of the athletes' limbs would throw the spears enormous distances. Tennis, golf and other sports of ancient vintage were practiced here on a grand scale.

Knabinas wrestled or engaged in boxing matches, or staged gymnastic exercises in groups of thousands.

Bela Wilson was on the field, for Lillian Wells had caught her reading and was very much shocked. Lillian was trying to find some excuse to get rid of this girl, but Bela did her duties conscientiously during the working hours. She felt that Bela would never become a true Knabina, but with silent and stubborn resistance follow her own will. Lillian had seized the books and thrown them into a nearby furnace. "Senseless drivel!" she called them.

Bela shook her head. "On the contrary," she replied, "they are records from better days."

Lillian Wells had compelled her to go out to the sports field with her.

"Here is true progress," she said. "Here, the strength and beauty in womanhood has triumphed over the weakness of sex. She is now about to subdue nature completely."

Bela listened indifferently. She had read books—she knew that other people felt as she did—and she smiled quietly.

Grando Blanco was also on the field. His face was peaked and strained from his long stay in the depths of the earth. Yet he sat his racing car like a Greek god, as he sped about. After awhile he approached Bela on foot.

"Grando!" Bela had unconsciously shouted the name and had to keep herself from flinging her arms around him.

He laughed at her.

"Well, little Bela! You still here? I had almost forgotten about you. Are you getting accustomed to your new life here? Have your ideas become reasonable yet?"

"Who is this?"

"More reasonable than all of you who waste your lives in work."

"Yes you, who waste your lives!"

It was not Bela who spoke. A tall gray-haired man with a long, narrow visage stood in the center of the field speaking in a loud voice. A group gathered about him, with laughing faces. They enjoyed the opportunity of making fun of the "foolish Professor."

He stood there, his long white hair waving in the breeze.

"Yes, you waste your lives. You are insane enough to believe yourselves gods whereas you are but erring subjects of that great God in whom you do not any longer believe. You want to become supermen and forget the greatest thing about humanity—love. Sacred love! The love of man and wife! The love of the children you do not deserve to have born into your degraded Motherhood Institutes.

"Turn back! Think of your souls! Read the books

of the ancients. Stop your foolish battle against the eternal laws of nature. Be what you were intended to be—men and women. Do not lower yourself to the level of the machines!"

There was a burst of laughter from the crowd. The Knabinas joined hands and danced around him in a ring—hooting with derision. Bela stood there with wide-open eyes. She stared at this old man with the flying hair and young voice and turned to Grando Blanco. Werner began to speak again, but his words could not be heard in the uproar. Blanco stood there calmly with a smile on his face.

"Grando, help him! Can't you feel how right he is?"

His glance met Bela's. He shook his head and mounted the platform beside the professor. He motioned the crowd to silence. Bela stood on the ground below, enthusiastic. Grando was a convert to the prophet!

"Quiet!" Grando Blanco looked about him with keen eyes.

"Really, are there not many among you whom this old man has helped with his medical knowledge? Don't annoy him. A man who has reached his skill and prominence can afford fantastic theories, surely! His mind is confused. He cannot understand our age. It is very unbecoming to all of us to make fun of a slightly insane person. Go on about your occupations. Leave him alone.

"You, Professor Werner, return to your laboratory cave and your scientific experiments. The new world wants to know nothing of the old, and needs no prophet."

Bela was desperate—utterly disappointed. Grando's unexpected words tore her heart. The crowd dispersed quietly. Grando descended to the ground. His lips were curled in a mocking, tolerant smile which hurt her to see.

"Have I done well? Have I protected the foolish Messiah from the madding crowd?"

She looked at him with such sorrow in her eyes that even Grando felt uncomfortable under their scrutiny. Then she ran up the steps of the platform. Her eyes were swimming with tears.

"Master! Take me under your protection!" She broke down at his feet. He stooped and raised her in the kindest

CHAPTER VI

Into the Earth

● Al Jenkin, Chief Engineer of the Electric Department, stood before Grando Blanco.

"The new power plant in the side gallery 70 miles below the surface is completed and ready to operate. But there are various disturbances which I cannot account for. I fear they may be due to factors of which we have no knowledge—perhaps new elements not yet discovered."

Grando nodded.

"I will go down there myself. You don't have to go back. The strain of the past few weeks is telling on you. Get some rest."

Grando himself had had very little rest lately. He had just returned from violent exercise on the field, which had terminated in the incident of Professor Werner. He turned and entered the office of the Knabinas. Lillian Wells approached him.

"We must send Bela Wilson away."

"Why?"

"Oh well, the scandal on the sports field—fancy her taking the part of this mad prophet!"

"Is she unsatisfactory in her duties?"

"On the contrary, she shows ambition."

"Does she violate any rules?"

"She goes her own way—is disliked by all and always made fun of."

"Does she complain?"

"No. In fact, she doesn't seem to notice it."

"Well, Sinjorina, we have the right to discharge a Knabina only if she refuses to do her duty or intentionally violates rules and regulations. With her private affairs, we are not concerned so long as they do not affect public morals. Sport is a privilege but not a duty. Incidentally the man whom you call a mad prophet is one of the greatest physicians of all times. Let him have his little humors and let Bela Wilson have hers!

"I must say I like her to have a mind of her own. As to what the other Knabinas think—well—I know nothing about feminine beauty. I have never taken any interest in it, having had more serious things to consider, but I do think she looks a great deal prettier than most other Knabinas here. Probably they are a trifle envious. But it's all right. Woman has achieved much since she has freed herself from her primitive instincts, but she retains one little vice—vanity. So much for Bela Wilson. I have something more important to talk about. I need at once a Knabina to go down the shaft with me and to record on the phonograph my observations."

During this conversation they had walked into the great workroom. Grando was speaking in full tones. Bela Wilson stood nearby, preparing to take up her work. She approached the two talkers.

"Take me along!"

"I have to go very deep into the shaft—70 miles below the surface."

"All the better."

"Can you handle a phonograph?"

"I used to do it every day in Santa Machina."

"All right then, come along!"

Although Grando was perfectly indifferent to her charms and suspected nothing of her love for him, he took a certain interest in his cousin. Lillian Wells helped Bela prepare her equipment, shaking her head doubtfully. Bela put on her diving suit and a moment later stood in the elevator car beside Grando. As the car began its mad plunge into the depths her heart beat rapidly. She had to devote all her energy to overcome a sense of nausea.

Fortunately the descent took only a few minutes. The car stopped and they got out. Conditions were very much the same as on the surface except for the somewhat uncomfortable diving suit. A spacious gallery stretched out before them—illuminated by artificial sunlight. It was almost filled with machinery which controlled the drilling of the shaft still further into the earth.

Grando had not spoken once. His entire attention was taken up by the control apparatus and register dials. He tested everything with a stop watch in his hand, making brief ejaculations into the transmitter which connected him with Bela, who in turn dictated his curt remarks into the phonograph. Although their relation-

ship was on a strictly business basis, Bela was joyful. She was his assistant. She was permitted alone, beneath the earth with him, to be of assistance in his work.

Some half an hour had elapsed when the lights were suddenly extinguished. With a swift jerk of a lever Grando connected a storage battery and the light came on again. He sent a signal by telegraph dial, manipulated a few controls and hurried to the edge of the main shaft. There was of course no work going on during his investigations. He felt with his hand the edge of the opening. A thread of hot water was running down the wall.

"Hurry We have got to get up again. Something is wrong with the machine above."

He pushed Bela into the elevator car and with breathtaking speed they ascended to the first subterranean station, just below the surface. They got out. Grando had not stopped the car. It had refused to go farther!

"Hurry!"

Here, again, only the emergency lights were burning. Grando seemed to have forgotten his companion. She followed him hurriedly, with a feeling of anxiety. It became quite light as they found themselves in a large gallery. This was a natural system of grottos which they had utilized and which in all likelihood extended for miles throughout the entire mountain mass. Grando rushed into a side grotto where a huge generator stood. It was not in operation, for a jet of hot water was falling on it. Looking up, he perceived that a fissure in the arched roof, from which the water came, was rapidly widening. Grando leaped back pushing Bela before him. A deafening crash rent the air. A huge piece of rock fell on the very spot they had left a second before.

They were knocked down by the shock and lay for a minute in complete darkness. Then Grando pulled himself together. He pressed his flashlight and turned to the emergency lighting machine. Under his ministrations it soon resumed operation. The fall of rock had just missed it.

Now he looked about him. The ceiling of the gallery had caved in. The mass of rock formed a mighty wall between their cavern and the main shaft, making any exit impossible by the way they had come. Grando had hastily stripped off his diving helmet. A low rustling noise penetrated through the stone barrier. Bela had followed his example and removed her helmet. Here, only a mile below the surface, the air was sufficient for breathing. Probably there was some connection with the outer atmosphere through the cave system.

● Bela's eyes expressed her horror, although she uttered no sound. Grando pushed a hammer against the wall and listened carefully to the sound of each blow.

"A subterranean hot spring has broken through. At any rate the exit is blocked and if it weren't, the elevator is probably destroyed."

"Which means?" Bela knew her danger without asking.

"They may soon be looking for us to get us out of here—but it is also possible that the shaft has collapsed."

She admired his calmness. She could not understand her own calmness, however. She had a feeling of intense happiness she had never experienced before. For some reason she did not want anybody to come! Here she was, alone with Grando. What did it matter that there was danger—that they might perish here? They would be together.

Grando was not thinking along the same lines.

"It is very improbable that they would look us up here. They would suppose us to be still at the bottom of the shaft."

There was a wireless receiver in the cave and he hurried over to this and listened in.

"An influx of hot water occured in the shaft. The shaft is filled up to the 47 mile station."

"Where is Grando Blanco?"

"He went down to the bottom with a Knabina."

"In other words, he is probably lost."

"Yes, unfortunately it is almost certain. What is to be done?"

"Pump out the shaft, and call Ben Vintros to the scene."

"Any attempts to save Blanco?"

"Is it possible to get into the shaft?"

"Not as long as the water is in there."

"The water is almost 25 miles deep over him, so there isn't much chance."

"When can the pumping begin?"

"In three days. We must get machines from outside."

"Arrange everything as quickly as you can. Keep Blanco's death secret for a time. Which Knabina is with him?"

"Bela Wilson."

The above conversation was conducted between the supervising engineer and the president of the Construction Board. Grando could understand every one of the words exchanged, but the distress signals which he was continually sending remained apparently unheard. And then the receiver went dead. Some disturbance seemed to have suddenly prevented wireless communication to the surface. The indifferent attitude of the President of the Board did not seem heartless to Blanco. A man's life was not considered very important in this materialistic world. He turned around and looked into Bela's terrified face.

"We are doomed?"

"Only the dead are hopeless. One thing is certain, however. We cannot count on any help from outside during the next few days."

"Which means that we are lost."

He looked at Bela and was somewhat astonished at the calm manner in which she spoke. He had expected her to burst into tears.

"It's not my fault. You joined me at your wish."

"I am glad to be with you."

He looked at her in surprise, but her meaning was not even then clear to him. He interpreted her calmness as a sign of confidence in his ability to save her.

"All right! Let's go over the machine first."

He inspected the generator once more.

"I think it will last another few days. Then the fuel will be exhausted."

"Then we will be in the dark."

"We have three small lamps with storage batteries. These will last an additional three days. In other words we must reach the surface in six days or . . . Check up on the supply in that emergency food closet."

Bela opened the door.

"Enough for at least two weeks."

"That's taken care of then."

He piled some oiled rags in a heap and made a little fire.

"What are you doing that for?"

"Have you noticed that the atmosphere in here is quite fresh? It means that there must be some connection to the outer atmosphere. The smoke of the fire will give us a clue to the right direction."

Grando had not reckoned wrongly. The smoke rose gently and was drawn to the back of the cave.

"Put out the fire; take one of the lamps and come along."

Grando detached one of the metal ladders from the side of the machine. This he leaned against the wall at the back of the grotto and ascended.

"Here is an opening," he called. "But wait!"

Bela followed Grando up the ladder and saw him crawl into the narrow passage.

"Remain outside!"

She had to obey the order, but saw him disappear with panic. She was alone with a small miner's lamp. How the time dragged! Grando was gone a whole hour.

"Get me a dynamite cartridge and a fuse," he asked.

She climbed down and obeyed silently. When she handed them up he disappeared once more. Another hour! Then he was back again. He had ignited the fuse. As he appeared above the ladder there was a slight detonation. At the same time foul-smelling smoke came down the cave.

"Hold a cloth before your nose!"

Bela was suffering from nausea, but Grando seemed to be unaffected. Then a smile appeared on his face.

"The smoke is being blown away. See? Let's hurry now!"

He opened one of the closets built into the rock walls.

"Can you carry this rope and these two lamps?" It was a heavy load, but Bela nodded. Grando himself was loaded with food cans, a hammer, a pickaxe and an iron crowbar, as well as a long cable of wire on one end of which he connected a powerful electric bulb. The other end of the wire was attached to the emergency light machine in the cave.

"Let's go, then. The passage is narrow and low. We will have to crawl and push our things before us."

They proceeded. The passage was not only narrow, but obstructed by loose rock which Grando first passed back to Bela and she in turn cast behind her. The electric bulb on the wire gave a brilliant light.

"Here we are." Grando stopped, stood on his feet and pounded with the pick against the rock before him. The obstruction began to sway and then fell forward out of sight. It must have fallen into a great depth beyond, for there was no sound of the fall.

"Come along," called Grando. His orders were very concise.

● They stood in the hole created by the blast. Before them was empty space—a huge natural cavern of unknown depth.

"We will lower the cable with the lamp on it." They let it down slowly. "Seventy feet. That is just the length of the rope. Hand me the crowbar and the hammer." Grando seemed to be following some predetermined plan. Nothing puzzled him. With powerful blows he drove the bar into a crack in the rock and fastened the rope to it.

"Can you climb down, or shall I have to carry you?" She was pleased at his offer, but shook her head.

"Thanks. But I can do it myself."

"Well then, go on ahead."

It was not a pleasant feeling to hang by one's hands with the rope swinging back and forth. She couldn't help feeling that it would have been easier if he had gone first and held the rope for her. She reached the floor in safety.

"Try to catch the cable when I throw it. Ready?" She caught it. She had by now become accustomed to his brief orders—which at first had seemed almost rude.

"Anything down there you could fasten the cable to?" he called.

"There is a large stalagmite here."

"Will it hold my weight? I have to fasten the rope to the cable and slide down."

"It will hold." Bela fastened the cable as best she could and held it with all her strength.

"I am coming!" He began to descend. Bela's heart was pounding. There was a sharp crack and the soft substance of the stalagmite began to give. It broke and Bela felt herself drawn up into the air, holding the cable desperately. She braced herself with her feet against the wall of the cave, but was carried up some fourteen feet into the air. Grando landed with a jar, but was unhurt. He held the rope, having seen what was happening. "I will let you down slowly," he said. They stood beside each other once more. Bela's hands were badly cut.

"If you had let go then I should have broken some bones. I suppose I must thank you now. You are a brave girl."

She felt as if she had been awarded a medal, for Grando's compliments were few and far between.

He took up the bulb at the end of the cable and hung it as high as he could on a stalagmite. The entire chamber was illuminated and they could see all its wonders. It was huge. In the center of the cavern a lake could be seen and into it poured a small waterfall. Cold water! The dome of the roof was very irregular and covered with hanging stalactites, which gleamed like icicles.

"How glorious!" Bela unconsciously exclaimed.

Grando laughed, " 'How beautiful' said the hunter as he looked at the charging elephant! But you are a brave girl." For the second time he had praised her!

"How could I be afraid when I am with you?"

"Your confidence is very touching, but down here I am just a simple human without one of my machines to assist me. Now let's make a fire—or can you use your hands?"

His concern for her was very pleasing. Grando had brought along the remains of the oiled rags. Soon a column of smoke was rising to the rocky roof.

"Are you repeating your former experiment?"

"Yes, but in addition to that we will heat two cans of food, for the human machine must be fed."

She prepared a meal while Grando busied himself down at the lake.

"Here's some more dinner for us! Can you cook fish?" It was a strange sort of fish that Grando had caught in his hand. Where its eyes should have been there protruded long feelers. Its color was greyish white and its shape seemed distorted.

"Good Heavens! How disgusting it looks!"

"But if it only tastes good we won't have to look at it."

Grando went back to the lake. Bela was happy as never before in her life. Everything was just as she had read in her books. Here she was helping her man by preparing his meal. Suddenly she called "Grando!"

"What's the matter?"

"There is a bat fluttering around here in the cavern!"

"That is wonderful news! That proves there must be some connection with the upper world."

"Smoke is moving in that direction," she pointed out.

He took his binoculars out of his pocket.

"There seems to be a hole up there—but how can we reach it?"

They ate their meal and then Grando stretched out on the rocky floor. "Let us rest a few hours," he said. "We must conserve our strength." In a few minutes he was sound asleep. He had not gone to bed for four days.

Bela, however, was too restless to follow his example. She was tremendously excited. She went down to the water. The lake was not very large, but apparently quite deep. For a moment she stood there in meditation. Then she looked at her sleeping companion. After removing her clothes she made a bundle of them and fastened it on her head. She plunged in and swam across to the other side. Two or three times she felt the blind denizens of that lost water touch her. It was a loathsome sensation. She climbed out and dressed quickly, not caring that her clothes were not perfectly dry. She stood at the foot of the wall above which Grando had seen the opening.

"Bela!" He had awakened and looked about him searchingly. "Bela, where are you?" He listened and from far away came a faint answer. He called again.

"Here on the wall," came the distant voice.

Grando was alarmed and raised his binoculars. Had the girl gone daft? Sure enough, there she was high up the side of the cave hanging to a protuberance and as he looked she lifted herself up still farther. How had she crossed the water? By swimming? He plunged in himself, clothes and all.

In a minute he was climbing up after her. Bela had apparently found herself unable to go further. Small pieces of stone crumbled down on him. For the first time he felt fear for another human being. She was doomed! He imagined her hold giving way beneath her feet! He could see her already hurtling past him (unable to help her) and falling to her death below!

"I have reached the top," she called to him.

She had crawled over the edge and lay there exhausted. He waited below in suspense. At last she called again.

"There is another cave up here—and a great many bats."

"I will come up."

"Get the rope. I brought a wire with me and can lower it to pull things up."

"Fine!"

How cleverly she had thought of everything! He returned for the rope and had to swim the pool twice more. She lowered the wire and pulled up the rope.

"Come ahead! I have fastened it to a large rock here."

"Coming!"

Grando ascended and soon stood beside Bela. He noticed at once that she was completely exhausted.

"You have been very careless."

"I just wanted to prove that I too can accomplish things—for you." But Grando did not grasp the significance of her words. "I almost fell once, when the cable got tangled behind me. But everything is all right now." She smiled at him happily. But Grando was already occupying himself about the business of their ultimate escape.

"The passage goes up very steeply," he remarked. "Do you think we can climb it?"

"Not now. I must rest." Dead tired, she lay down and slept.

CHAPTER VII

Rescue!

Grando returned to the lake twice more, bringing back with him all their impedimenta. He stood a moment looking down at a sheet of mica set in a metal frame. Why had he brought this along? He could not account for it, except that it had been lying loose beside the machine in the first grotto. He had taken it with the oiled rags and other material, feeling that it might prove useful.

Then he stretched himself beside his companion to get some more rest. Some hours later a loud scream awoke him.

"The cave!"

The first thing he noticed was the absolute darkness. He had been compelled to leave the bulb on the end of the cable behind him in the cavern, for it would not reach up to the new passage.

The great bulb below had gone out but down there it was not completely dark, for a shimmering fluorescent gleam covered the entire floor of the cave. The air seemed to be in motion. Fumes were ascending in swirling clouds. On one of the stalagmites a light appeared and became extinguished again. Then another one appeared and then several more. It was St. Elmo's fire—electric discharges.

Grando, with sudden inspiration, seized the plate of mica and set it up in the entrance to the passage, making it airtight with stones and rubble. Bela kept staring through the transparent window at the sight below.

"Lord in heaven!"

From a great distance came an indistinct crash. A thick black stream was pouring into the huge cavern from the passage by which they had originally entered. Boiling hot water and broken rock crashed down to the floor of the chamber. Then the bulb below flashed on momentarily from time to time, only to be extinguished in the end. Probably the machine at the other end of the cable was now completely flooded and out of order. Grando felt for one of his flashlights, but before he could turn it on a great glare flamed up, followed by a terrific detonation. Flash after flash occurred. The waters of the little lake seemed whipped by a raging storm and the thunder was multiplied by the crashing echoes.

Bela had seized Grando's arm and he held her close, unconscious of his action. The noise and light ceased but then the cavern was suddenly illuminated as if by daylight. A huge ball of white light was slowly floating in

circles on the water below. It would rise slowly into the air and descend again. The water now covered the entire floor of the cavern. In the utter silence the sight was uncanny and solemn. Grando removed the mica window. The air was pure and highly charged with ozone, due to the electric discharges. Then a rumbling noise was heard. The ball lightning had exploded and once more they were in complete darkness.

In solemn tones, Bela said, "I feel as though God himself had been present."

Grando did not understand why her words made such an impression upon him. He turned on the most powerful of the three flashlights.

"I think it was our salvation. The hot current has found its way into this huge cavern and now its force is exhausted. We will try to get down, cross the lake again and return to the first cave. It will now be possible to give signals to the people above."

He had scarcely finished speaking when a great illumination appeared in the tunnel high on the opposite wall of the cavern.

"Is someone coming?" But that hope was a vain one. The light grew brighter. And then a stream of white-hot lava poured down like a flaming cascade into the water below, which hissed violently. In a few seconds the entire cavern was filled with yellow sulphurous fumes. They both worked feverishly to return the mica window and wedged it in place with stones, making the barrier as airtight as possible.

"Thank God, that will keep the air breathable in here at least. The way back is no longer possible. We can remain alive for three days. If by then we do not succeed in finding a way out—"

"Then we will die together."

She wanted to feel his arms about her, but he had already limped towards the ascending passage.

"You are limping!"

"Yes. When you were climbing up here a stone fell and hit my ankle."

"Let me attend to it."

"There is no time for that now."

Out in the cave was a veritable inferno of steam and flame and noise. The crash of falling stalactites could be heard. Then a ghost-like silence fell.

They forced themselves to eat once more. The walls were damp and a trickle of water served them for drink. The climb was a painful one up a steep tunnel. Bela walked in front, fastened to her companion by the rope. Grando was greatly handicapped by his swollen foot.

"If we only knew where we are! The path seems to be very steep. But the air is tolerable."

"But no light."

It was on the evening of the next day. They had been compelled to throw away the largest of their battery lamps, for its current was entirely discharged.

"How do you expect to see light more than half a mile below the surface?"

The steep passage came to an almost horizontal tunnel. Its height was very irregular. At times they could scarcely see the roof above them, and at other times they were forced to crawl on hands and knees. When they became exhausted they lay on the hard floor trying to get as much rest as circumstances would permit. They ate the last of their provisions.

"We will have light for another half day."

The second battery had now been discarded and their last night was growing perceptibly dimmer.

"I can't stand it any longer!" Bela collapsed on the ground. "You go ahead, Grando, and save yourself."

But he too had come almost to the end of his strength and his foot throbbed feverishly. They both managed to find some sleep, but had been too exhausted to think of conserving their battery. When they awoke they were in darkness. Bela sat up, passing her hand wearily across her forehead.

"Why Grando! Isn't that . . . it is!"

He was on his feet at her words. A faint shimmer of light appeared in the distance. Mustering all his strength he took a few steps in that direction.

"The light is growing stronger. Light, Bela, light!"

With new courage they proceeded haltingly toward its source, and entered a small grotto.

"What is this?" she said, looking at the floor.

"Bones. The remains of animals? But no! Human bones! Is it a relic of prehistoric times? It must be."

Through a narrow crevice in the wall poured bright light. But they were at the end of their strength. They fell exhausted. They slept drunkenly. When they awoke again it was completely dark.

"Bela?"

"Grando!"

"Did I dream? I thought we had daylight in the grotto here."

"We did have light, but it has disappeared."

They sat beside each other for some time in hopeless silence. Bela leaned her head against his shoulder and wished he would hold her comfortingly, but he sat in stupid indifference.

"Too bad! I should have liked so much to finish the shaft before I died. And there were so many other things I wanted to do. It is a shame that a human being is such a weak thing."

Bela did not reply. She thought her own thoughts in the darkness: "I wanted nothing but to be with you—to die with you! and even now you cannot understand!"

Suddenly the crevice showed bright. Grando jumped to his feet.

"This is not daylight! There is a cave beyond and there is a man in it! Hola there!" he shouted. "Come on Bela! Shout so that he can hear us."

Bela was unable to use her voice, but Grando's hail had been heard. A face appeared in the aperture.

"Who is there?"

Bela, violently overcome by relief, began to sob. She was looking at the kind face of the old professor. Just now it bore an expression of utmost astonishment.

A few words of explanation were exchanged.

"Have a little patience. I will get you some refreshments first and then we will enlarge this crack so that you can get through."

Chance—or was there a Providence?—had guided them to the very inmost room of that cave in which the old scientist had his laboratory.

"Be careful," he warned them. "The work may cause pieces of rock to fall on you."

The pounding of the picks was sweet music to their ears. Werner and Gernhold were working hard to re-

lease them. The two prisoners were at a lower level and a ladder was thrust through the enlarged opening. Bela ascended first and fell into Will Gernhold's arms half unconscious. He carried her into the upper chamber. Before she fainted she could hear Grando's words: "There is a very brave girl—that Bela! She will be a very useful Knabina some day."

A smile was on her lips when her senses departed and her body relaxed utterly.

Grando's injured foot required medical attention and Bela's weak condition made it necessary for her to remain in the professor's sanitorium. But even before he would permit the doctor to examine his hurt, Grando insisted that he see his assistant, Lillian Wells. The news of his miraculous escape spread like wildfire. With Lillian there also arrived Ben Vintros. He had just got back from the Lunar mines to take Grando's place. He shook Grando's hand warmly.

"I am tremendously glad. I must confess I was a little nervous at the prospect of filling your shoes. I know far too little about your plans."

"In any case, I will ask that you now be permitted to remain here. I need a really competent assistant. I was lucky this time, but this work is too important to hang on the life of one man."

It did not seem inhuman to Grando that Vintros had made no reference to his personal danger. His life was valuable only because of the work he could do.

"And how is the shaft getting along?"

"We have made another twelve miles."

Grando sat up with a pleased expression on his face.

"Then the shaft was not flooded?"

"It was not even necessary to establish pumping units. The flow soon ceased and the total result was merely to soften the rock a little—more desirable than otherwise. But the 2-mile substation is ruined. A few hours after the water came, the whole thing collapsed. Now the entrance is completely obstructed with rock. If the water still flows, it has probably found a secret way of escape in the interior of the cave system. Since we no longer require that particular station, we thought it best to abandon it. The disturbances at the bottom of the shaft have disappeared as mysteriously as they came. Everything now goes along as usual."

Grando Blanco, in turn, briefly related his experiences —mentioning Bela's courage and assistance.

"Sinjorina Wells, I should like you to honor Sinjorina Wilson before an assembly of all the Knabinas of the department in recognition of her courage and presence of mind. Will you also please report to the Supervisor of the Motherhood Institute in New York."

Lillian Wells was chagrined, but her orders gave her no choice but to obey.

* * * *

Bela Wilson lay, completely fatigued, in a quiet gallery. Professor Werner was sitting at her bedside. He had taken a great interest in this young girl, of whom Will Gernhold had first spoken, and who had taken his part so sympathetically that day at the sports field. He knew that it would excite her to ask questions, so he placed the thought transmitter band around her forehead, while she lay there only half conscious. The old man sat there, reading her very soul as her thoughts revealed themselves.

Finally he rose very quietly and stroked her forehead kindly.

Meanwhile Will Gernhold had entered and Werner motioned him to follow out of the room. Back in the laboratory he grasped Will's hand sympathetically.

"Poor Will!"

Gernhold looked at him. "Why poor?"

"Banish all thoughts of this girl from your mind! She will never love you. Her soul is full of a great sacred love—but for another man. It is very sad! I have found two understanding humans—a man and a woman. But they walk on diverging paths which will never meet."

* * * *

The Professor sat at Grando Blanco's bedside. The bad ankle had been considerably aggravated by neglect, but was now properly bandaged. There was a bitter smile on his face. While he did not object to the professor's presence, his remark was rather an involuntary expression of his thoughts than a desire to start a conversation with Werner:

"How imperfect is man! Much more helpless than he thinks."

"Quite right."

Grando seemed not to notice the interruption.

"Here we are with the best of machinery, believing ourselves the lords of the universe—capable of everything and anything—but take us away from our machines! Once we have to rely upon our own bodies we become helpless.

"Only a ridiculous chance saved us. Supposing the station had had no connection with the surface! Suppose that Professor Werner had not chanced for a month to enter that outlying gallery and strike a light—we would have starved to death within a stone's throw of rescue!"

"Was it really chance?"

"What else could it have been? Anything that does not come under understandable laws is chance."

"Do you really believe that?"

● Grando grew restless under the solemn repetition of the professor's question.

"But yes!"

"There was a time when people used to look upon such things in a different light. Sinjoro Blanco, you are decidedly one of the most capable persons in our age. Now listen to me for just five minutes:

"Suppose not chance, but the Creator of all things, whom you have all forgotten to trust, suppose He had been the one to save you—to show you the way out. Perhaps he used Bela Wilson as his divine instrument. Suppose He had designed it so that this untrained girl instead of you, with your clever scientific mind, should be the one to find the exit.

"No—please let me speak! You predict from your observations that a great fall of cosmic matter will take place at such and such a time. I do not know if you have ever heard of a book called 'the Bible.' At one time it was held sacred by mankind. It tells of such a catastrophe long ago which swept away all humanity. The book says that the great Creator Himself had sent it because man had deserved to perish. May not this coming disaster be a repetition? Perhaps his eternal patience has been exhausted by the arrogance of your scientists—by the loss of all spiritual values—by the unnatural relationship between the sexes! Your whole adventure and rescue is a

warning—it should tell you what a weak, insignificant thing a man really is. He chose you—the most capable among us—to prove His point. This great Shepherd led you back from death to life and labor."

Grando Blanco had listened calmly and was now looking into Werner's face. Was this man mentally unbalanced? He could not deny that his words had mysteriously excited him. He smiled weakly.

"It would be a wonderful thought—if you were right. What a consolation if we could know that we are guided—that our fate is already mapped out for us!"

"You are on the right track now."

Grando shook his head slowly and sadly. "It is a false idea, unfortunately. You are a scientist. You know that man is nothing but a higher class of animal in evolution's great system. As the sap circulates in the tree, so the blood makes its perpetual rounds in our body. In principle we are no different from other creatures. When we die we all lie on an equal level. You don't maintain for an instant that a tree has an immortal soul?"

"Do you know all this?"

"Yes, certainly."

"But I tell you man knows nothing—literally nothing! He may think he does. We discover new physical phenomena and we play with them. The more powerful our telescopes, the more stars we can perceive. We are proud of this. The more our chemists learn, the more powerful weapons we have placed in our hands. But what do we *know?* Do we know the significance of the entire infinite universe and its laws? How was it created? And, what is more, why was it created?

"The little worm in the earth has no eyes. He does not know what it means to see. We are no better. If it could think, the worm would perhaps think itself the lord of the universe. It can see no master. We know nothing. But we can feel. The faith in an immortal soul has persisted throughout the ages. It must have been implanted in us by Divine power. The most powerful empires in history have invariably collapsed when its people began to deny their Creator.

"Now once more a civilization is denying the universal law. Well—it will perish as did the others if no change occurs soon. The change may come—a change toward inward enlightenment. It has come in Bela Wilson, for instance, who is much more clever than all of you put together."

"What has Bela Wilson to do with this?"

"I will tell you that, too, if you cannot see it for yourself. She is a weak girl. She has not a man's body nor a man's strength like the rest of the Knabinas (who are an insult to Nature), yet she has accomplished superhuman things in these last few days—as you yourself must admit. It was she who saved the life of the clever and strong superman."

"We underestimated her strength and the resistance of her body."

"Her body! You are wrong. Put her in the same position now. Make her again climb the wall and suffer the same strain once more—all by herself. She will fail. It was not her body, but her soul that accomplished what was done. It was her great overpowering love for you—for you, a blind fool quite unworthy of it. It was her desire to be with you—to save you or else die with you—which gave her the strength to do what she did. And this is the second great gift which the Maker of universes has bestowed on you.

"Grando Blanco, heed my words. Don't let me talk in vain—that common fate of prophets! You and Bela! You two are called upon to show a new example to the world. You must lead humanity out of its hopeless labyrinth and become the founders of a new race of people who shall again acknowledge their own immortality and send their prayers as of old to the Father of us all."

Grando was looking intently into Werner's face. "Perhaps I have been wrong. Your mind is clear enough. But you live in a different world from mine. I shall never be able to understand you. Nor can I see why Bela should love me—I have never done anything in particular for her. I have never experienced any similar feeling towards her. I will never ridicule you again—for you have helped me and saved my life. But I am just a common, materialistic person.

"In my belief my body will be discarded when I die—just as a piece of broken machinery. Let's not talk about it any more. I must admit I feel sorry for this misguided girl. Really she might have become a very useful Knabina. You see, all that appeals to me is her value as a machine—which must go along its predetermined course just as I do. But if an axle be bent, a machine will not run straight. It is no more use to me.

"Our thoughts will never meet, even if prolonged to infinity. Let's drop the subject. If you want to do me a favor, call Ben Vintros. While we have been talking I have just thought of an improvement for our cutters. If we can only complete our preparations in time, a new Deluge will not do us as much damage as it did to our unenlightened ancestors. I don't want to hurt your feelings—but please send me Sinjoro Vintros. I am satisfied with my own ways."

Grando laughed. "I will tell you something else. Here's a new view of things. I think our earth and, for that matter, the whole universe, is very much like an old cheese. When it reaches a certain state of decomposition, mold will grow upon it. But when it is completely dried out even the mold dies. We are the mold-fungus growth—the only difference is that we are perhaps a little more clever, and have our flaming ambition to drive us on. We wish to control and master all nature. Why shouldn't we? If our women are happier without sex, why shouldn't they be that way? What if the period of human life is shortened by a few hundred thousand years—we are happy in the meantime. And we *are* happy—we technical, materialistic people. That's all we care for.

"Here comes Ben Vintros. Sit down, Ben. We'll talk about sensible things now. See you later, Professor. Don't hold any grudge against me!"

Werner looked at him soberly. There was no contempt in his glance, but pity. He was wrong—this Grando Blanco. He was not happy. Happy? Bela Wilson would be happy if this man understood her. Will Gernhold would be happy if Bela loved him. Such were the thoughts of this old man, who himself had gone through life lonely and unloved. No happiness can be possible without love—sacred love!

* * * *

Professor Werner was sad in his very heart. He had preached to deaf ears. His was the fate of all prophets. Yet he was not angry with Grando Blanco, for this young

man was the child of a completely materialistic age. Only he himself, who observed all life from a philosophic point of view, could see how rapidly civilization was heading towards destruction.

He thought of Will Gernhold and Bela Wilson—whose hearts he had awakened. What should become of her? Back into the ranks of the Knabinas with her broken heart. Even revealing her very soul to Grando had been useless. Or into the Villa of some professional father? Impossible! He went over to her bed. Physically she was almost well again, but a sad expression remained in her eyes.

"An idea has just occurred to me, my child. As you know I have some very sick people here who must be taken care of. There will be many more as this insane construction continues. Will you remain here and help me care for my patients?"

A vague smile glided over her face.

"Oh, may I? But I am almost more afraid of people than I am of their machines."

Werner communicated with New York and the supervisor gave his consent, after the professor had expressly agreed to permanently care for Sinjorina Wilson. "Why," the supervisor said to himself, "is there so much fuss over a silly little Knabina?"

CHAPTER VIII

The Plot Unfolds

● The time was now approaching when the great impact of meteoric material was expected. From all directions the great stratosphere ships were arriving, bearing the guests of honor. From the airport the guests continued their journey to Berlin in rocket cars. Some of the visitors, however, wore an anxious look. No one could be certain that the great event would prove a harmless spectacle in pyrotechnics.

Sam Bell had not been idle during the past few weeks. With the courage of a fanatic he had burned a great scar on his left hand, thus managing to obtain a month's leave of absence. He had not spent this time on the Madeira Islands, as he pretended, but had been very busy acting as instructor in aviation on the African coast to a group of intelligent students.

In an uninhabited section of the Sahara Desert were ranged in long rows the airplanes which Mosilihortse, the Emperor of Africa, had long ago purchased but for which he had until now found no use. These preparations had been noticed by the rest of the world, but was considered perfectly natural. Was not Asia expected to attack any day now?

What the world did not know was that these planes were equipped with the latest improvement in artificial cloud production and were now merely waiting for the expected hurricanes to waft them over Europe. By the time the first visitors were arriving, Bell had returned to Berlin and once more taken up his duties.

Sinjoro Nernst was glad to have his reliable assistant with him during these eventful times. During the night of the 15th of October a few minor meteoric falls occurred. When the meteors reached the electric shell which surrounded the city of Berlin they burst into a thousand scintillating sparks and vanished. This preliminary test had a quieting effect on the nerves of the visitors. They were housed in the great public caravanserai which had taken the place of the ancient hotels.

On the 16th of October the lunar observatory reported: GREAT SWARMS OF METEORS SIGHTED. CALCULATIONS INDICATE THE IMPACT WILL BE FELT IN BERLIN.

The warships of the Blacks were waiting close to the Morocco Riff, where heretofore no cosmic disturbances had been felt. As soon as the destruction of Berlin commenced, Sam Bell would send into the ether a single code word—the signal for the great attack.

The 16th of October fell on a Sporto. Many thousands of people had come to Berlin from Paris, Prague, Rome and other cities. Throughout the German capital the flat roofs of houses and factories were crowded with sightseers. Citizens took great pride in expressing complete confidence in Sinjoro Nernst's barrier ray and the visitors did not want to appear less courageous than the natives. Midnight was not far off. To further enhance the splendor of the approaching spectacle, the artificial lights had been extinguished. The firmament stood out clear and deep over the heads of the assembled crowds—numbering in the hundreds of thousands.

Loudspeakers announced the latest report from the lunar observatory.

THE METEORS ARE COMING.

There was feverish excitement.

Sinjoro Nernst was in the power station. He was pale with emotion, but fully confident of his success. In another room was Sam Bell. Had Nernst seen his eyes—had he read his thoughts on the transmitter—he would have shuddered. Bell's half-closed eyes were filled with hatred. He was erect and tense, and a hard line marked the corner of his mouth. His hand was on a lever.

"What are you standing at the engine for?"

"You can never tell—perhaps the shock might effect the switch and break the current. I think I will stand here and hold it in place."

"Sam Bell! This is the greatest day of our lives. Today our work will be crowned with success—yours as well!"

"Yes, mine as well."

There was some quality in his assistant's hoarse voice which caused Nernst to wince slightly. Then the loudspeakers were roaring.

"THE METEORS!"

The stars were obscured and the sky darkened. Then thousands of small sparks burst into lights—thousands of shooting stars were racing down, followed by an indistinguishable black cloud. The phenomenon rapidly approached the earth. The flares and lights were now on a gigantic scale, but in perfect silence. Then the first of the falling masses hit the barrier ray and a gigantic, coruscating flame burst into being and the missiles vanished in spectacular glory.

Nernst, like every one else in Berlin, was looking upward. He was absorbed in watching the machinations of human ingenuity conquer at last this age-old terror of the universe.

Then the silence was rent with horror. A hundred thousand voices shrieked as one. The crash and rumble of unimaginable disaster burst on the ears. Cries and screams were drowned in the tornado of sound and shock.

Then sudden peace once more and the calm spectacle

continued far above at the barrier ray that had been so admired a fraction of a second before. But that one second had caused incalculable damage. Entire streets had been turned into hopeless ruin. Thousands of people lay crushed or buried. Explosions of spontaneous nature had added to the damage of the crashing meteors.

Confusion reigned supreme. Thousands of spectators leaped from the low roofs. Many a man who had been spared by the cosmic holocaust was now trodden under the panic-stricken feet of his fellow men.

"BE CALM! ORDER! ORDER!" The loudspeakers were howling. "ORDER!"

Gradually people regained their reason. After all, the barrier ray was once more functioning. Showers of meteors were falling up there and being disintegrated harmlessly.

"PLEASE BE CALM!" It was Nernst's voice over the loudspeakers. "THERE IS NO LONGER ANY DANGER. A KNAVISH CRIMINAL DISCONNECTED THE CURRENT FOR HALF A SECOND. HE HAS BEEN ARRESTED. EVERYTHING IS ALL RIGHT AGAIN."

The fires which had broken out here and there through the city were soon extinguished. The construction materials of the age were almost entirely steel and glass and fire was seldom an element of danger. Unfortunately, the industrial section had suffered the most damage.

* * * *

When the first meteors touched the barrier ray Sam Bell's motionless hand was still on the lever. When the main mass of the fall came racing blackly down he pulled the switch. The barrier of rays ceased to exist and Berlin was delivered over to destruction. Then a strange thing happened. Grando Blanco would have said "Chance" and Professor Werner would have exclaimed "Providence!"

A piece of meteoric iron struck the flywheel and this burst. A piece of one spoke flew sideways through the power station, neatly amputating the arm of the American representative on the way, and struck heavily against the generator of the barrier ray. The resulting shock startled Sam Bell who released the lever almost as soon as he had pulled it down. The lever promptly snapped back into place and Berlin was once more protected.

During this fraction of a second, however, thousands had been killed and entire blocks had been laid waste. Nernst had not been hit either by the piece of meteoric matter nor by the fragments of the flywheel. He had stepped back in dismay when the mishap occurred. Then he saw his assistant, Sam Bell, on the floor. The mechanic was kneeling on his chest.

"What on earth? Let go of Sinjoro Bell!"

"He threw the switch to send us all to death!"

Bell had got to his feet. His eyes were bloodshot and his body trembled. His words were almost inarticulate in his vehement hatred.

"Yes. So I did. Damn the God who protected you! I wish I had succeeded. By now Berlin would have been destroyed. But your God has defeated my plan."

Nernst could not believe even then. He made Ralph Schirmer, the mechanic, repeat what had happened—and still again.

"But the man in the hospital. He must have gone insane."

But still he could not believe that this man—to whom he had given his full confidence—was a criminal.

● The fall of meteors was over. The first heavy fall was followed by a few insignificant shooting stars. The lunar observatory sent out confident reports. The stars were shining brightly once more over the city of Berlin. In the great Government Building the representatives of the Blanco states had convened. Their faces were serious and determined. No representatives were present from France, Italy nor South America. These Sinjoros were among the victims.

"Five thousand."

"Then the ray barrier has not proved successful."

"On the contrary! It is just this very catastrophe which testifies its perfection. If a criminal . . . "

Now Nernst rose from his seat.

"Was he really a criminal?"

The chief of police nodded significantly. "I have overheard his thoughts. It was an ingenious plot—nothing less than the beginning of a war of hatred between the Blacks and the Yellows."

Just then the Australian representative arrived. He had been saved by a lucky coincidence.

"I wanted to take the space ship back to Canberra," he said, "but there aren't any. Thousands are waiting."

The German foreign minister rose. "All space ships have been commandeered by the United Government of the Blancos. At this moment thousands of airships of the Nigros are crossing or have already crossed the Mediterranean. They are invisible behind artificial clouds. Tomorrow at daybreak they plan the destruction of the cities of Europe.'

The American shook his head. "That must be a rumor."

"No! It is a telepathic confession of the man Sam Bell. It is part of the plot to destroy us all, with the almost successful destruction of Berlin as its prelude."

Silent horror lay over the assembly. They began to realize at last the rising problem of the Black-Yellow danger. Suddenly the gray head of Professor Werner was visible among them.

"They are flourishing races! What would the loss of a hundred thousand men mean to them? But woe to the Whites—who are dying out. The degradation of your women shall prove your ruin."

The old man spoke in the voice of a prophet. He departed as he had come and no man attempted to detain him. His words left a vague impression of dismay on the minds of those present. For these men had come fresh from the shattered streets where the dead lay in long rows waiting burial—where the groans of the maimed and injured were still to be heard from the hastily extemporized stations.

The blatant loudspeakers broke the silence.

"THE CHINESE ARMY STANDS READY FOR THE GREAT AIR ATTACK ON AFRICA. IT IS EXPECTED THAT WAR WILL BE DECLARED TOMORROW. THE AFRICAN SPACE SHIPS ARE HURRIEDLY RETURNING TO AFRICA."

"So the danger is over!"

"It is deferred—but has not ceased to exist."

The tense atmosphere of approaching disaster lay over the half-destroyed city.

CHAPTER IX

Sam Bell's Punishment

● This materialistic age had one advantage over previous areas—there were no criminals. Courts were no longer necessary. Why should there be criminals when the conditions which bred crime no longer existed? There was no love, therefore no murders or jealousy. There was no patriotism—therefore no national parties. There was no want of the necessities of life—for as the population decreased, the wealth of each individual increased. The many farms which lay thickly in the tropical zone (Santa Machina was one among thousands) produced ample food for everyone.

There was not even a craving for wealth—for what use would wealth be to people who had no families? Who had no mistresses to surround with pomp and luxury or to place in sumptuous palaces? Gold had become a mere medium of exchange in the great battle against the common enemy of mankind—Nature. Work was considered a matter of course, for the government stores would only dispense food and clothing in exchange for work performed. There were neither charitable institutions nor unemployment bureaus. Compassion was extinct in the world. No one cared if one of his neighbors perished.

But work had become easy, for it was nothing more than a mere supervising of the machines. Such personal ambition as remained was nothing else than the sport instinct carried to the extreme—a craving to break a record. The whole world enthusiastically hailed the bold technician or the daring space navigator or the executor of fantastic projects. Six thousand years ago it had been the same, but then the public idols had been boxing champions. The greater part of humanity dozed peacefully in the everyday routine of their work. They carried out their dull tasks in a daze and accepted their government rations in the evening. Their spare time was spent in recreation. But the ambitious ones would spend long hours over plans, thinking up fantastic solutions.

Government was concerned with little except the administration of the great public enterprises and the running of the food farms. Two things came into this world of sports and machinery which aroused every man and Knabina from lethargy.

The war between the Flavo and Nigro. This war between two backward peoples who had been laughed at in seeming superiority and who now suddenly presented themselves as a very real menace!

Then there was the crime of Sam Bell, the Nigro who had shown by his years of devoted work that he was the mental equal of any white man and who had then almost destroyed Berlin with a single movement of his hand.

A court was hastily formed out of the government representatives present. They were jurors without a law to guide them. Sam Bell stood in the prisoner's box with a stubborn, spiteful face. His body was erect and strong. He did not deny his guilt, for he was not even questioned. On his forehead was placed the thought transmitter. There was no use of denying in a world where the mind was not permitted any privacy.

President Linco asked the jury, "What shall we do with this man?"

"We ought to execute him. But there is no law which would permit such an action. We might keep him in prison—as they used to do in the old days—but why feed him if he doesn't contribute his share or work? Then too, he has killed thousands of our friends."

An old man rose from the jury. "It is beneath our dignity to take an eye for an eye—a tooth for a tooth. It would be degrading to any white man to have to kill a Black. There are no professional executioners. I think we should take him over his own country in an airplane. He can descend to the ground in a parachute and they may treat him as they wish. That would be the best means of showing them how little we fear their power."

Sam Bell was accordingly taken into the cabin of an airplane. Neither by word or gesture had he betrayed any emotion. After the sentence had been pronounced the thought transmitter had been removed from his forehead. He sat beside the pilot. He could not move without setting up an automatic high-frequency current which would have killed him instantly.

Over the former Sahara desert—not far from Timbuctoo—the pilot shut off his power.

"Take the parachute!"

"With the greatest of pleasure! Give my sincere thanks to that foolish President of yours. I have a feeling that we shall see each other once more."

The pilot made no answer. Sam Bell jumped and fell slowly to earth. The airplane turned towards Europe.

Emperor Mosilihortse was again conferring with his counsellors.

"Bell has betrayed us. He has only served the interests of the Whites. He promised to destroy Berlin. What he really did was to save it. It is easy to see through his schemes. He just wanted to lure our warships across the Mediterranean and there deliver them into the hands of the whites."

"He has not succeeded, however. We have managed to get all our airships back to Africa before the battle fleet of the Blanco could reach them."

The Emperor of Africa was not aware of the real value of the battle fleet he feared. There were no warriors left in Europe and the ships were piloted by men who knew little or nothing of the arts of war. Mosilihortse sat as though in deep thought.

"I can see only one way out. The Asiatic attack may begin any day now. I shall get in touch with the Emperor of Asia—offer him an alliance—and suggest a united attack upon the white race. They will not expect it now, and the Chinese are even better prepared for war than we. A united attack on the whites! I think it will appeal to them. Yet the Flavo must not be the victors."

A malicious smile played about his lips. "The whites are their superiors. Our own fleet will let them have the honor of the attack. From the rear we can easily participate in the victory, if there is one, or return first in case of defeat."

The door of the room swung open and Sam Bell entered.

"Here I am! I managed to . . ."

Rage distorted the Emperor's features.

"Yes, here you are! I can see! Here you are, you traitor, and you dare . . ."

"I . . ."

Frightened by the Emperor's menacing attitude, Bell reached into his coat for a weapon.

"Have you forgotten what I told you? - Here, take

this!" And Mosilihortse sank his ready knife into Sam Bell's breast. Bell fell on the floor. His lips were distorted in a wild grin. "Now," he gasped, "you have murdered the only man who could have saved you!"

"Get that traitor out of my sight."

The murderer had been spared by the whites, only to receive his punishment at the hands of his own master.

Then the Emperor called his secretary to dictate the letter to the ruler of Asia. Two hours later an airship was carrying it to its destination across the seas.

● Not far from Berlin a huge funeral pyre was blazing. The crematories were entirely inadequate to take care of the dead. It was a mass funeral, yet without tears. Who would mourn? There were no loved ones to be left behind. It was conducted like any other business-like task. There were no obituaries and no prayers. The disaster merely meant more room for those who had survived.

* * * *

Ben Vintros had become Grando Blanco's right hand. Ben was an exception to the general rule. He showed some affection toward his sister, who had been with him on the moon. He had requested that she be transferred to the Brocken Observatory. She was now pacing the rooms in the observatory in her usual masculine manner, discharging her duties. She was accompanied by Ellen Mors, another Knabina.

* * * *

Grando Blanco had had to remain another few days in the Professor's cave to complete the healing of his injured foot. Werner had seized many an opportunity, not to again speak to Grando about his ideas, but to observe him. He admired greatly this man's clear hand, boundless energy and iron will. But he also observed Will Gernhold, lost in sorrowful dreams of his hopeless love for Bela.

Again and again he had tried to woo her and became so obsessed that he was of little use nowadays as a doctor's assistant. Werner would shake his head in grief. Why had all his hopes been shattered? The more he observed Will, the more he realized that he was nothing but a well-intentioned weakling. He was a man without real force or strength of mind. He would never have been a proper founder of a new race.

But Grando Blanco? Why was Blanco only strength and will and Gernhold only heart? Why had not Will been endowed with the engineer's iron constitution and able brain? Or why was Grando not given Will's understanding heart?

Between the two stood Bela Wilson, sad and despairing. The one great hour fate had given her had passed and she had lost. Now Grando scarcely noticed her when she came into his room to bring him food and refreshing drinks. She was nothing more to him than any Knabina servant. And Will? She was deaf to his violent exhortations. She spoke to him, but something within her courageous soul held his effeminate appearance in contempt. She would accept the books he presented her. But even books now failed to make her happy. What use was it to read, in the pages of the past, of a happiness lost to her forever? She received some consolation reading about the belief of the ancients in an all-wise God—who controlled and directed human fate. She would have eagerly become a believer herself—if only she could know and understand something about it all.

The Professor would sit for days and days in the most secluded of his studies. An idea had taken possession of him. It was eating its way into his soul:

"Grando's brain! Will's heart! Oh to be more than just a weak mortal! Will's heart; Grando's brain! If one only could exchange these two!"

● Hang Cho Fu, Emperor of Asia, who had been called the New Ghengis Khan, was sitting in his palace talking to his minister of war, the genial Tschun Lo Fen. Neither in person nor in his surroundings did he resemble his ancient namesake. He had removed the capital of China to Canton, where he was in a more central location to administer his new overlordship of all Asia. Japan was now only a subordinate province. The last vestiges of English rule had been stamped out of India.

Canton was a city of six million inhabitants and in no way resembled its earlier existence. Even the government palace on the low hill was plain and utilitarian in appearance. The rest of the city below stretched out in uniform buildings of steel and glass. There was no romantic atmosphere remaining from the past centuries.

Hang Cho Fu was about fifty years of age and dressed entirely in the European fashion. Only the occasional treacherous look in his slanting eyes and the prominence of his cheek bones betrayed the cruel Asiatic. It took a man of his nature to become master of Japan—even though this unfortunate country had been much weakened by earthquakes and natural catastrophes.

"Tschun Lo Fen, I have received a very strange letter. It has given me a great deal to think about and perhaps may change all our strategic plans."

"Too bad! The entire air fleet is ready to start. I thought of taking advantage of the East hurricanes to reach Timbuctoo in quick order and destroy the heart of the Black Empire."

"Read the letter."

The minister took from his master's hand a voluminous document, written in Esperanto.

"Aren't we fools to try and destroy each other?" he read.

The minister looked up.

"Tomorrow Mosilihortse the Last will no longer be in a position to call us fools."

"Go on reading."

"Are we really enemies? Aren't we really natural allies against a common enemy—the White race? They have been so arrogant as to regard the entire world as their property. They came from the tiny continent of Europe and proceeded to rob and murder at large. To whom belonged America? Was it not once the land of the Redskins, now long extinct? They dragged away thousands and millions of our Black brethren as slaves. These slaves have been free for many hundreds of years but still the Whites look down upon them as their inferiors.

"What have they done to Asia? For centuries they assumed rulership of great areas. But what is this White man—merely a degenerate human calling himself a God! But to us—the Blacks and the Yellows—belongs the future. We are the youth of the world. The Blancos are the ancients. Why should we fight each other? Rather let us go together against the arch enemy and occupy the thrones which they have prepared for us.

"What good will it do if your airships cover Africa with poison gas? She is one of the great centers of grain production. Her entire vegetation will die out under the gas, from which, it is true, we cannot defend ourselves. The entire fertile land will be laid waste. To whose advantage? Certainly not China's.

"On the other hand, what is Europe? It is, so to speak, one huge factory. If our combined fleets in a few hours fill her atmosphere with poison, the white race will perish. But the machines will remain as they are. Asia has its thousand million inhabitants—Africa a quarter of that. In all Europe and America are four hundred millions. What difference if all the whites were destroyed? Asia has enough people to repopulate it. If we work together, we will rule it together.

"After all, where is the harm in killing a quarter billion white men? In the course of thousands of years have they been careful of the lives of others? When they conquered America they slaughtered the inhabitants—the same in Australia. You know what the White race has on the debit side of its account. Let us unite our forces for the destruction of Europe! The remaining whites—150,000,000—in America could not harm us—us, the world dominant Yellow-Black Empire. Never has there been such an opportune moment. They suppose us engaged in an internecine struggle. Your fleets can come to Africa and ours make every preparation—all without any suspicion. Once we are assembled, one night's journey brings us to Europe. Our first attack will destroy Berlin and Paris simultaneously. Your gas is so effective that in matter of hours it will cover thousands of square miles with a thick, lethal fog. Nothing can live. In eight days there should be no more Europe.

"In a few weeks our armies would have invaded the dead continent. They would not be warriors, but engineers and technicians. They would take possession of the deserted factories. Overnight the industry of the entire world would be in our hands. Not for nothing have we sat at the feet of the whites for thousands of years in seeming subordination. Judge for yourself, my Imperial Brother of Asia, whether it is right to destroy each other so that the White may laugh at us. Is it not better to set forth side by side to the conquest of these arrogant 'superior' Blancos?

Tschun Lo Fen finished reading the letter.

"It is a great idea. When Europe is ours, it will not be difficult to get a few hundred million of our people over there within a few months. It will be easy after that to turn our attention to Africa . . . "

The Emperor jumped to his feet. "We would be the lords of three continents. The fourth, Australia, would fall an easy prey."

"How about America?"

Hang Cho Fu laughed. "America? The proud Yankees, who claim to be the smartest people on the face of the earth! If that be so, they will make clever slaves. They will cringe and bow and work for us and suffer, as the world has worked and suffered in the past under their whip. We will not kill them—not by any means!"

Their European clothes and modern surroundings contrasted strangely with their words—these two Orientals who had unconsciously betrayed their racial heritage, the blood-thirst of the Great Khan. To destroy Europe! To extinguish all life in one glorious holocaust! The Emperor visualized the scene as though he were already in Berlin. The immense armies of coolies were directed by his yellow engineers, who had so eagerly learned their technic from the Whites!

"Your Excellency, take a rocket plane and go to Timbuctoo today to make the contract definite. Make Emperor Mosilihortse believe in our friendship. In the meantime I will temporarily disband the army. The soldiers may return to their fields. In the new army, every officer will be an engineer. The generals will be factory managers and the scientists will be field marshals. We will show the world that we were intelligent pupils."

The next day Minister Tschun Lo Fen had arrived in Timbuctoo. This city had changed very much from the old days of the slave trade. It was a city of some six million inhabitants and had been built according to modern ideas. It was situated on the shore of a great lake. This change had come about within the last two thousand years, when the huge task of thoroughly irrigating the Sahara with water pumped from the ever-running streams deep in the subsoil had been completed. Now a huge level plain, covered with vegetation and dotted with freshwater lakes, extended from the Atlas Mountains down to the territory of the Niger River. Lush fields lay on the site where centuries before dusty caravans had died of thirst.

Timbuctoo looked entirely different, however, from the sober, materialistic city of Canton. The soul of the Nigro still loved elaborate display and lively colors. The palace of Emperor Mosilihortse was built on a hill. It was a gigantic golden mosque, glittering in the sunlight. It was guarded by troops in colorful uniforms. It was run with a pomp which the rest of the world had long considered childish nonsense. The interior was decorated with the utmost luxury and the harem was populated by hundreds of women from all parts of the world. The Emperor of the Blacks was the last ruler in the true Oriental manner remaining on earth.

And still Africa must not be thought entirely behind the times. Universities and technical schools were to be found all over the continent. The quick intelligence of the blacks had brought them far since the day they walked naked through the jungle. They had developed into a haughty race with a strong sense of their own importance. Their cultural level was closely akin to that of the Roman Empire shortly before its fall.

Tschun Lo Fen was received with elaborate pomp and led into the Imperial Palace. His mocking smile caused no suspicion as he stood in seeming reverence before Emperor Mosilihortse and offered in behalf of his master the consent of Asia to the great coalition. The plane which had brought him was small and inconspicuous and had travelled secretly at night, for this journey and its purpose had to be carefully concealed from the Whites. It was fortunate for this Africo-Asiatic conspiracy that thought receivers were not of sufficient range to enable the government eavesdroppers to read the thoughts of these men in the palace in Timbuctoo.

(To be concluded)

Flight Into Super-Time

(*Continued from page 229*)

happening; for these ignorant savages, the Gholpos, regarded it as a manifestation of some divine or demoniac power in league with the Psounas, and were henceforward altogether broken and cowed.

The Psounas, it seems, were prone even from the first to a more naturalistic supposition regarding the character and origin of the time-sphere. Their long familiarity with the strange ultra-stellar robot may have helped to disabuse them of any belief in the supernaturalism of mere machinery. I have had no difficulty in explaining to them the mechanism of our vessel and the voyage we have made along the aons.

My efforts, however, to tell them something of my own world, of its peoples and customs, have so far met with polite incredulity or sheer incomprehension. Such a world, they say, is quite unheard-of; and if they were not so courteous, probably they would tell me that it could not even be imagined by any rational being.

Li Wong and I, as well as the Psounas, have learned to talk with the singular entity whom I rescued from the diabolic living flowers on a world midway between the earth and Mohaun Los. This person calls himself Tuoquan, and he is a most erudite savant. His ideas and discoveries, being somewhat at variance with the notions that prevail in his own world, had caused him to be regarded with suspicion and hatred by his fellows; and, as I surmised, he had been abandoned by them, after due process of law, to a cruel doom in the jungle.

The time-machine in which they had followed us to Mohaun Los was, he believed, the only vessel of the kind that had so far been invented by this people. Their zealous and fanatic devotion to legality and law-enforcement would have led them to pursue us beyond the boundaries of the universal continuum. Fortunately, there was small likelihood that they would ever dispatch another time-machine on our trail: for the lingering etheric vibrations that had enabled them to follow us, as dogs follow the scent of their quarry, would die out long before they could construct a duplicate of the unreturning polyhedron.

With the aid of the Psounas, who have supplied me with the necessary metallic elements, I have repaired the broken connection in the time-sphere. I have also made a miniature duplicate of the mechanism, in which I am planning to enclose this letter and send it backward through time, in the seemingly far-fetched and fantastic hope that it may somehow reach the earth and be received by you.

The astronomers of the Psounas have helped me to make the needful computations and adjustments which, indeed, would be utterly beyond my own skill or the mathematical knowledge of any human being. By combining in these calculations the chronometric records of the dials in the time-sphere with the ephemerides of Mohaun Los during the past seven months, and allowing for the pauses and changes of speed which we made during our journey, it has been possible to chart the incredibly complicated course which the mechanism must follow in time and space.

If the calculations are correct to the most infinitesimal degree, and the movement of the device is perfectly synchronized, the thing will stop at the very moment and in the very same place from which I left the earth in retrograde time. But of course it will be a miracle if it reaches the earth at all. The Psounas have pointed out to me a ninth-magnitude star which they think is the solar orb of the system in which I was born.

If the letter should ever reach you, I have no reason to think that you will believe my tale.

Nevertheless, I am going to ask you to publish it, even though the world in general will regard it as the fantasy of a madman or a practical joker. It pleases an obscure sense of irony in my mental makeup, to know that the truth will be heard by those among whom it must pass for a fantastic lie. Such an eventuation, perhaps, will be far from novel or unprecedented.

As I have said before, I am well enough contented with life in Mohaun Los. Even death, I am told, is a pleasant thing in this world, for when the Psounas wax old and weary, they repair to a hidden valley in which they are overcome by the lethal and voluptuous perfume of narcotic flowers.

However, it may be that the nostalgia of new ages and new planets will seize me anon, and I shall feel impelled to continue my journey among future cycles. Li Wong, it goes without saying, will accompany me in any such venture: though he is quite happily engaged at present in translating the Odes of Confucius and other Chinese classics for the benefit of the people of Mohaun Los. (This poetry, I might add, is meeting with a better reception than my tales regarding Occidental civilization.)

Tuoquan, who is teaching the Psounas to make the fearfully destructive weapons of his own world, may decide to go with us; for he is full of intellectual curiosities. Perhaps we shall follow the great circle of time, till the years and aeons without number have returned upon themselves once more, and the past is made a sequel to the future!

Yours ever,
Domitian Malgraff.

EDITOR'S NOTE: Granting the truth of Domitian Malgraff's narrative, and admitting that his letter was launched from a world in future time, there are still certain problems that baffle explanation. No one knows how long the mechanism containing the letter had been floating in the Banda Sea before it was picked up: but in order to reach the earth at all, in the unimaginably complicated maze of temporal and spatial movement, it must have fallen there not long after the departure of the time-machine from Malgraff's laboratory. As Malgraff himself indicates in his letter, if the timing had been absolutely perfect it would have landed in his laboratory at the very moment when he and Li Wong began their journey!

THE END

The Platinum Planets

(*Continued from page* 259)

Incapable of coherent thought, he bent down to examine his victim. He fumbled for his torch, the better to see the man. Then, with a hoarse scream, he fled from the room. For *there,* lying in a pool of blood was his adored kid brother, Bunch.

● What happened after, Jackthorpe could never remember.

He had visions of white pillows and black deeds, of days of torture, and nights of terror. When, finally, he came to himself, he was in a nursing home. He lost no time in leaving, and made straight for home, slinking in by a side door. He wanted to hide, to hide. Through the long corridor he crept, and into the library.

There, in the corner by the stained glass window were the eerie "Platinum Planets", presided over by the gilded figure of Ignace Pascal. The wretched man cringed from them, but he felt impelled to look straight at them. For a moment he blinked, then fell into a chair. There, in the center of the group the grinning dervish, intent upon his devil play, stood sinister and exulting. *The ninth piece, "Slaughter", was in place.*

A ticket hung from the statuette. Weakly, the broken man moved towards the piece and examined the tag. It was in Bunch's handwriting and said, simply:

"Who says it's not a kid's game?"

Jack slumped to the floor. It was all clear now. Annoyed that he would not take him, Bunch had secured the *Asteroid,* fitted her with robots, and somehow managed to raise Pascal's liner and secure the treasure. He wouldn't sell, naturally, so that he could bring off this coup. Obviously, when Jack had thought Namur was robbing the mail-ship, Bunch was merely handing over the statuette, so that it would be delivered early.

And now it was all over. The old superstition was only too true: the "Platinum Planets" had claimed their victim.

* * * *

"Bouncing baboons, Jack, you've led us a nice dance. What the devil do you mean, skipping out of the nursing home like that?"

Jackthorpe looked round with a strange fear in his eyes, for it was the voice of Bunch.

"It's all right, old bean," cried Bunch as he noted his brother's horror-stricken face. "It's not the giddy old ghost come clanking his chains. I'm . . ."

"You're alive?" said Jack slowly and incredulously.

"Yes!"

"Then, I . . . dreamed . . . it . . . all?"

"Oh no, you didn't. That token of brotherly love was real enough. But, you see, you're a rotten shot. You hit me on the shoulder instead of the bean and knocked me down. Hit my nose on something, and bled like a bullock. Must have fainted. When I came too, found you in a high fever telling the world you'd murdered me."

"But how did you raise the liner with nothing to help but robots? And, why the devil did you impersonate Namur?"

Bunch laughed uproariously.

"*Those* weren't robots. You see, when you turned me down, I stated my case to our university science club. My fellow students, who are always ready to give superstition the K.O., in the interests of science, said they were ready to man the *Asteroid,* and beat you to it. We adopted the 'Namur' stunt to frighten you off. But when you continued to follow us, you old warrior, you put us in a stew. You see, we hadn't a decent space engineer aboard, and we developed engine trouble.

"We kept speeding along for a while, and then slowing up. The only chance was to catch the mail-ship and hand over the treasure. We just managed it, as you know, and then broke down again.

"When you showed us you were coming aboard, we thought the best way to keep up the joke was to impersonate robots. I nearly died of laughing behind that curtain, that is, until you socked me."

"But Jack was still dazed. He felt Bunch all over, to make sure he wasn't dreaming. Finally he said slowly, "Then the superstition didn't work, after all?'

"They never *do,*" said Bunch positively. "We live in an age of science, not cobwebby 'jujus.' Besides, I've been looking up the giddy old legend, and I find it says nothing about 'murder.' It says 'Blood will be spilled' and, Lord knows, my beak bled a bucketful."

And, with a total lack of reverence, Bunch proceeded to strike a lucifer on the posterior portion of the grinning dervish's anatomy.

"Guess this guy," he murmured whimsically, "was just 'cut out' for this job!"

THE END

EARTH'S NEW NEIGHBORS

For many years it was supposed that all the asteroids, or miniature planets, were between the orbits of Mars and Jupiter, where seemingly Nature had provided a path for one large planet. Of late years the rule was upset when it was found that the little planetoid Eros comes nearly three times as close to us as Mars does; and that a large number of asteroids (called the "Trojans") are revolving practically in the orbit of Jupiter, although keeping several hundred millions miles from him.

Now there have been discovered other tiny heavenly bodies, probably not more than a couple of miles in diameter, coming within a few million miles of us, and actually crossing inside the earth's orbit. So close were they when found that it seemed almost possible they might be satellites of ours. The new discoveries, of interest to all interplanetary enthusiasts, and their possibilities, will be discussed by a distinguished astronomical authority, Dr. Donald H. Menzel, in the August issue of

EVERYDAY SCIENCE and MECHANICS

NOW ON THE NEWSSTANDS.

Science Questions and Answers

This department is conducted for the benefit of readers who have pertinent queries on modern scientific facts. As space is limited we cannot undertake to answer more than three questions for each letter. The flood of correspondence received makes it impractical also, to print answers as soon as we receive questions. However, questions of general interest will receive careful attention.

A Difference of Two Thousand Miles an Hour

Editor, Science Questions and Answers:

By reading an article on the Einstein Theory I gather that one of its propositions states something to this effect.

Two observers, A, and B, are on the earth's equator and on opposite sides of the earth from one another.

A is observing the sunrise.

B is observing the sunset.

A, with the aid of precision instruments, measures the velocity of light as it passes him.

B does likewise.

Later, A and B compare figures and find them identical.

Now according to my reasoning there should have been a difference of about 2000 miles per hour. Please explain.

O. L. Morse,
San Bruno, Calif.

(If we are to believe Einstein, both men will find the velocity of light to be the same, even though one is moving toward the light rays and the other away from them. For Einstein's theory of relativity is based upon the constancy of the velocity of the light, independent of the motion of the observer.

The explanation for this apparent contradiction, Einstein makes by stating that the "precision instruments" of the two men were really not reading alike. That as they moved, with reference to the source of the light, the sun, (one man moved away from it, and another toward it) their recording instruments changed. Or let us say that the two men were moving with reference to each other. One man was moving east at 1000 miles an hour and the other west at the same speed. Therefore they had a speed relative to each other of 2000 miles an hour.

Now each man can consider (according to Einstein) that he is at rest and the other observer is moving at 2000 miles an hour. Each will find that the clock of the other man will be slowed up and his measuring instruments will be shortened, so that the two men are not really using identical instruments. Therefore when one man says that the light moves past him at 186,000 miles a second, his yardstick by which he measures miles, and his clock, by which he measures seconds are different from that of the other man.

If the motion of the earth were suddenly to stop, so that the two men were at rest with reference to each other, then their measuring instruments would again become similar.

The amount of the contraction of the yardsticks, and the amount of the slowing of the clocks are determined by the Fitzgerald Contraction equation, which has been printed a number of times in these columns.

The difficulty that the average man has in understanding Einstein, is a difficulty in picturing the change in yardstick and clock, especially when Einstein permits each observer to feel that his instruments are right and only the other observer's are wrong. But Einstein appears to be accepted by most of the authoritative physicists and mathematicians.—Editor)

Water in a Space Ship

Editor, Science Questions and Answers:

Suppose in a space ship having reached a point where gravity is nullified, where no artificial gravity is inside, a tumbler of a liquid were upset. Would the liquid floating in the air in the vessel, form a sphere? If not, what other shape would it take. Or is this unanswerable till one has gone and found out!

B. S. Murton,
London, S. W. 5, England.

(If the space ship were far enough away from any heavenly body, so that any external gravitational force acting on it were practically zero, then the water would fall into globules.

Water possesses what is called surface tension, a tendency of the outer molecules of the water surface to form a thin film. This can be observed by very gently lowering a small needle into a glass of water. If it is done carefully enough the surface tension of the water will support the needle, although the needle is really too dense to float.

Similarly if water be released in a field of no gravitation (assuming the gravitation exerted by the ship itself to be practically nil) then the surface tension will form the drops into globules, of smaller or larger sizes to float about the room. If they struck a wall, each sphere would probably break into smaller spheres, but the globular shape would be maintained.

It can be easily understood that when surface tension acts upon a liquid, it naturally molds it into a spherical shape—Editor)

An Arrow's Spin

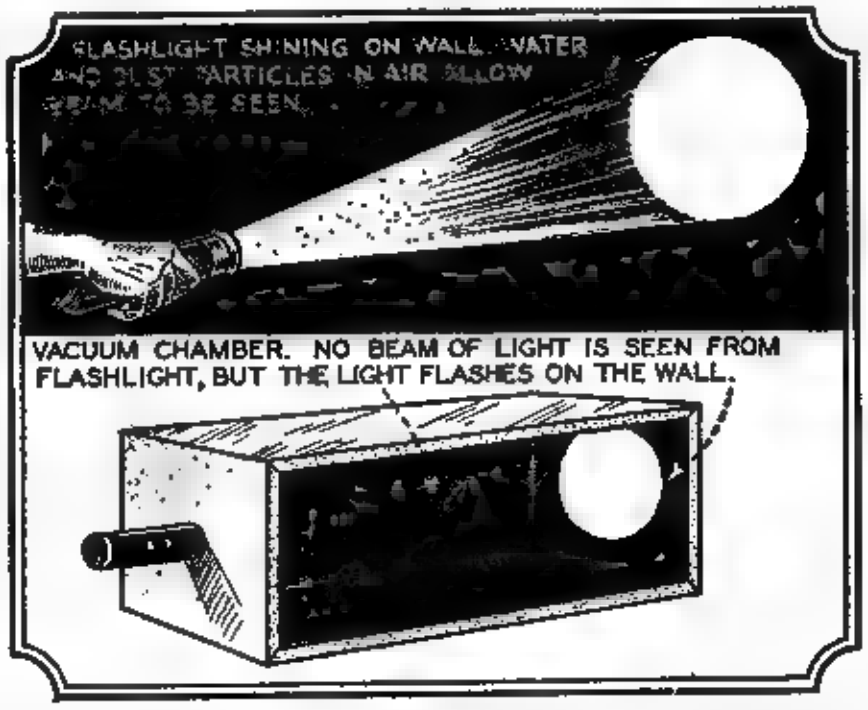
Editor, Science Questions and Answers:

An arrow revolves in a circle and during its revolution always points toward the center of the circle it makes; while another arrow also revolves in a circle but during the arrow's revolution it is parallel to a tangent to this circle. Which of the two arrows spin?

Nicholas Proholuk,
Throop, Pa.

(The actions of the two arrows are fundamentally different. The first one really rotates on its axis, and by the definition of spin, it really spins. The second one rotates around its axis, and by definition, therefore, it does not spin. The arrow that always points toward the centers of its circle of rotation therefore is the one possessing the spin.

Therefore the earth in turning continually on its axis spins, but the earth in circling the sun, even though its axis remains parallel to itself and tangent to its orbit does not spin.—Editor)


FLASHLIGHT SHINING ON WALL. WATER AND DUST PARTICLES IN AIR ALLOW BEAM TO BE SEEN.
VACUUM CHAMBER. NO BEAM OF LIGHT IS SEEN FROM FLASHLIGHT, BUT THE LIGHT FLASHES ON THE WALL.

Showing the different effects of air and a vacuum on light. In the upper picture the rays of the flashlight are reflected by dust and moisture in the air. In the vacuum chamber the rays are unseen until they strike a solid object.

A Beam of Light

Editor, Science Questions and Answers:

Does a beam of light cease to exist when the source is extinguished or does it continue to travel until intercepted.

J. S. Hoerl,
San Francisco, Cal.

(We must first understand what we mean by "a beam of light." A body heated to incandescence emits waves of electromagnetic energy. Such bodies are stars, like our sun, incandescent lamps, flashlight filaments, etc. Some of these waves strike our senses as heat, and others of a limited range of frequency strike our eyes with a perception of light, in other words they "illuminate" the object that emits them. We "see" objects either because they emit light themselves, or because light waves are reflected from them to our eyes.

Thus the beam of light that we see emitted from a flashlight is reflected to us by the dust and water particles in their path. If the flashlight were turned on in a vacuum, we would see no beam, but only the splash of light when the light waves struck a wall or some material body and were reflected back to our eyes.

Now a light wave emitted from the sun was understood to travel, theoretically, on and on through space until it hit some body from which it was reflected, or within which it was absorbed. If it struck no body that detracted it from its path, it would have gone on forever, stirring up the ether.

As a matter of fact it is believed now that as it goes on, it loses energy, just as a water wave gradually loses its energy and disappears. The light wave would weaken, its frequency would become smaller (its wavelength longer) and if enough of its energy were lost it would no longer strike the eye as light, but as heat waves, or waves of the frequency of radio waves. Naturally, then, the extinguishing of the source of the light will have no effect on light waves already emitted, but there will be no further emission.—Editor)

READERS

If you like "Science Questions and Answers" in this magazine, you will find in our sister magazine, EVERYDAY, SCIENCE AND MECHANICS, a similar department, greatly expanded called "The Oracle." Look for it, you science fans!

IN this department we shall publish every month your opinions. After all, this is your magazine and it is edited for you. If we fall down on the choice of our stories, or if the editorial board slips up occasionally, it is up to you to voice your opinion. It makes no difference whether your letter is complimentary, critical, or whether it contains a good old-fashioned brick bat. All are equally welcome. All of your letters, as much as space will allow, will be published here for the benefit of all. Due to the large influx of mail, no communications to this department are answered individually unless 10c in stamps in cover time and postage is remitted.

Lord Rutherford Does It!

Editor, WONDER STORIES:

I have been a subscriber for one year and I feel certain you will appreciate that the highest proof a reader can pay his editor is to renew his subscription for two years. The reason is that you give me stories that I like and a magazine that I look forward to receiving each month.

Naturally I do come across a story now and then that personally I do not like, but these are very few. Stories of the future are my favorites, good time stories and interplanetary [illegible]

"The Time Stream" was excellent, and Mr. Taine is to be congratulated for producing what must surely rank as a classic in science fiction. "The Final War" was another very excellent story. What a fine food for reading for members of the Disarmament Conference!

I must not forget Mr. Miller whose stories I have enjoyed; and I look forward to more of these. Also to Clark Ashton Smith for his excellent style, his perfect English. It is always a pleasure to take up Wonder Stories and read one of his tales.

I was pleased to see Miss Bess in the June issue, and I hope to see more of her work in the future. She is an authoress of great talent, and her stories are always first [illegible]

Before closing stories and authors, I would like to record my appreciation of Mr. Starzl's work, especially those which deal with his famous "I. F. F." I am only sorry that I may never live to actually see them in action, for I am of the opinion that nothing is impossible in science, and I feel that any day these thrilling interplanetary wars will be enacted in life. It is in that spirit with which I read Wonder Stories.

Now for the authors! How many of the authors have made use of atomic guns, etc. Most of them, one time or another, and yet many people look upon atomic power as a bit of literary imagination, even some of our own readers, I am afraid.

Last week, Lord Rutherford, who broke the nitrogen atoms in 1922, announced that his experiment in splitting the atom was successful. So far, few details are at hand. The news first came through the radio. 100,000,000 volts were used. Apparently a considerable amount of energy was used, before a square hit was made. Also it was recorded that transmutation of matter occurred.

The only comment Lord Rutherford made was that so far, he could not say at this stage whether the experiment would be of any commercial use, and the research would be continued. The experiment was carried out at the Cambridge laboratory and to put the thrust at ease—there was no damage.

Still the first step, the atom is split at last, and now may we hope space ships are not too far distant, and perhaps may one day appear.

W. Barratt,
London, S. W. 16, England.

(Yes, the first step has been made. And what its final conclusion may be, no one can guess. The vast future predicted by our authors is gradually opening. It makes one dizzy to dwell upon it.—*Editor*)

C. A. Smith on "Garbage-Mongering"

Editor, WONDER STORIES:

I should like to say a few words about one or two points which F. Schuyler Miller raises in his interesting letter in the June Wonder [illegible]

Personally, I cannot see that science fiction is, as he puts it, "unfortunately limited" in its range of expression. At least, I do not think that a type of literature so avowedly imaginative would benefit materially by invading, as so much modern fiction has done, the field of clinical analysis and sex-physiology. This sort of thing has been done ad nauseam and and ad nauseum by non-imaginative writers, such as are favored by the professional "intelligentsia" of our sex-demented republic; and one of the most refreshing things about science fiction, and fantastic fiction in general, is the avoidance of such tiresomeness.

To me, the best, if not the only function of imaginative writing, is to lead the human imagination outward, to take it into the vast external cosmos, and away from all that introversion and introspection, that morbidly exaggerated prying into one's own vitals—and the vitals of others—which Robinson Jeffers has so aptly symbolized as "incest." What we need is less "human interest," in the narrow sense of that term—not more. Physiological—and even psychological analysis—can be largely left to the writers of scientific monographs on such themes. Fiction, as I see it, is not the place for that sort of grubbing.

Certainly I do not think that H. G. Wells, in the tedious analytic novels of his later phase, would be a good model for an imaginative writer. Wells, in his earlier years, wrote some marvelous fantasies. But afterwards, he was more and more seduced into sociology, psychoanalysis, etc., etc., till his stories became a truly awful example of everything that fiction should not be. No doubt they are excellent treatises, but as tales they are simply unreadable.

What science fiction chiefly needs, I should say, in a rigorous raising of literary standards, an insistence on good English as opposed to the jargon of magazine hackwriting. Form and finish are all too often lacking in stories otherwise excellent.

As to gaining the recognition of the "highbrows"—well, I hope that science fiction will never gain it, if the winning of this guerdon must involve an emulation of the opulence and tediumities, the highbrow pornography and general garbage-mongering of the current school of realistic nevelists.

Re the celebrated strictures of one Mr. Schwartz, it appears to me that they hardly need refuting, since they are patently ridiculous. "Black-mouthed" youths and mental subnormals in general are not likely to be interested in either science or imagination, such as is purveyed by Wonder Stories and other magazines of the same type.

Clark Ashton Smith,
Auburn, Cal.

(Clark Ashton Smith throws a refreshing note into the controversy—science fiction and its future. Mr Smith himself is a model for what he wants from science fiction; for in all of his stories we get the tremendous thrill of escape from our petty little world, into the vastness of unknown universes.

We would be glad to get comments from other of our readers who agree or disagree with Mr. Smith and his viewpoint.—*Editor*)

In Defense of Francis Flagg

Editor, WONDER STORIES:

I don't usually write letters to your magazine, though I generally read it with interest, letter column and all. I was surprised, and somewhat amused, to read Mr. Kenton's (I think it is Mr. Kenton, a friend borrowed my magazine and I can't be certain of the name) letter re the merit of your various authors. It was, I think, utterly uncalled for for Mr. Kenton to discuss any author on a degrees in the writing profession.

Does Mr. Kenton realize that one of the authors he dismisses so unceremoniously—Francis Flagg—has had a story win honorable mention by the O. Henry Award? The ladies and gentlemen comprising the O. Henry Award committee happen to be quite prominent short story critics, and I am sure would not give a story honorable mention unless it had some merit, some claim to be well-written. As a skilful writer of stories in science and weird fiction, Francis Flagg is certainly no disgrace. I might ask how many of Mr. Flagg's stories Mr. Kenton has read. And I might—but I don't wish to be catty—inquire of Mr Kenton if he means the wealth of wide reading and scientific knowledge which is implied in the writing of such stories as "The Machine Man of Ardathia," "The Blue Dimension," "The Land of the Dipos," "The Dancer in the Crystal," and "The Picture!"

Mr. Kenton does do one good thing: he has wit enough to rank Mr. Smith very high. The best science fiction authors I have read in Wonder Stories to date have been Flagg, Smith, Dresser, Starzl, Hilliard. I don't maintain these authors ARE the best; I merely state they have struck my fancy. But indeed why be arbitrary! Hardly an author that has written for Wonder Stories but what has interested me in some fashion. Flagg for his realism, erudition, technique; Smith for magical spinning of glamorous words, and for the uniqueness and strangeness of his yarns; Repp for cleverness and pace of his plots, though he is not the equal of the others in handling words, and Starzl for the flow and swing of the action in his stories.

To close, I admit my favorites are Smith, Flagg, Starzl, etc., but I don't imply by that that all other authors are disgraces to the writing profession, that they can't write, or that their stories are uninteresting. Please, Mr. Kenton, don't be too absurd.

(Continued on page 282)

ON LETTERS

BECAUSE of the large number of letters we receive, we find it physically impossible to print them all in full. May we request our correspondents, therefore, to make their letters as brief and to the point as they can; as this will aid in their selection for publication? Whenever possible, we will print the letter in full; but in some cases, when lack of space prohibits publishing the complete letter, we will give a resume of it in a single paragraph.

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The sexual embrace
Warning to young men
Secrets of greater delight
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The reproductive organs
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Education of the family
Sex health and prevention

Girls—Don't Marry

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How to be a vamp
How to manage the honeymoon
What libertine is after a lover
Secrets of the wedding night
Beauty diets and baths
Do you know—
How to attract desirable men
How to manage men
How to know if in love
How to acquire healthy grace and beauty
How to beautify face, hands, hair, teeth and feet
How to captivate charm
How to dress attractively
Intimate personal hygiene
How to pick a husband

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THE READER SPEAKS

(Continued from page 281)

Since you asked for comments, Mr. Editor, I hope to see this letter in print. Best wishes, and keep up the good work of editing a very interesting magazine.

L. Westfall,
Bell, Calif.

(The winning by Francis Flagg of honorable mention in the O. Henry Award given for the best short stories written each year is news and good news to us. Flagg undoubtedly has an excellent style and a fine sense of story construction, and our readers will be glad to be informed of this recognition to him.—*Editor*)

Triple-Cursed Trash

Editor, WONDER STORIES:

Every time you print for your readers a story written by a foreign author you free the readers from the unending parade of offspring of a fear-instilling entity . . . namely, the American authors . . . and their stories. Each month (almost without fail) we are greeted by a story (at least one) that is a complete flop. The story may be written by one of America's greatest authors . . . by an author whose work is praised high and low . . . But, we all know from reading science fiction that all authors have their bad points . . . that at times they write stories that hold us spellbound . . . perfect stories . . . and at other times these same authors dish out page after page of triple-cursed trash.

But . . . It seems that every story written by a foreigner (imported stories) keeps our eyes riveted to the page to the very finish. Is it because we read so little fiction written by these versatile Europeans? Or are every one of their stories 100% perfect? After reading "Cosmic Cloud," "Stone from the Moon," "Shot into Infinity," "Flight of the Aerolx," "In the Year 3000," etc., I feel as though I'd give anything to read a German or French science fiction magazine. Well, how about it, Mr. Editor? What is it that makes these foreigners outshine our writers? *I* believe that they do.

I believe that the most amazing story ever written will be one that will take up three issues in serial form and in its theme be a story that does *nothing else* but explain the world of a thousand years future. I do not mean a time traveling story. (I rave and tear my hair when one of these things come along.) I mean a "history-book" of the future, something like Stapledon's "Last and First Men," except that it should not tell about the very far, far, distant future. Imagine, a story taking one part describing the people of the future, another part describing business, buildings, and living conditions, and the third telling about governments, warfare, etc. I'm waiting for such a tale. Will some author kindly oblige?

Science Fiction has "evolved", so to speak. Remember, back in the dim, dark, ages of the beginning of science fiction? The first stories written told about starts of space flights, trips to the moon, Mars, and other planets, describing the flights as they progressed, telling of the hardships and sicknesses of the passengers on their first flights . . . But now ! ! ! What do we have? By this time, "all space flying is perfected to the nth degree." In one paragraph, "our hero" steps into his space rocket, pulls the "atomic disintegration" over, and the next paragraph shows the same by landing on Pluto or some other celestial body floating at an unheard of distance from the earth. Well? What causes that? Are the authors getting tired? I suggest a long rest for our present authors, giving some newcomers a chance.

Jos Kucera,
Omaha, Nebraska.

(Our policy, in publishing occasional foreign stories, is not to belittle American authors, but to vary the national diet. It is true that authors of any nation tend to have a sameness about their approach, their style and material. Frenchmen, Englishmen and Germans think differently and write differently than we do, and their stories consequently have a freshness about them that is stimulating to the appetite.

If there is anything about American writers that the editors dislike it is their tendency (a holdover from the movies of ten years ago) to introduce into every story a handsome six-foot hero, a leering villian and a bewitching, sweet and innocent heroine. And this eternal triangle works itself out to the last inch by the old formula.—*Editor*)

"The Final War" Must It Come?

I didn't want to write again so soon. But I must! I must! The reason is, "The Final War" by Herr Spohr. I got the March and April issues on the same day, and in the afternoon I started reading the first half; in the evening the second half. When I finished, it was 2 o'clock in the morning, and afterwards I couldn't sleep. It's a devilish story.

Unnecessary to say it's the best of all the war stories (I understand, or can read, six languages) I ever read. Unnecessary to say that one can see or feel after the first three pages, that it has been written by a man who saw the hell of the Great War.

My thoughts the whole night were: Is there any mistake in the story? Is there a mistake in the science or in the technical descriptions of the story? No! Is there a mistake in the description of military and strategic things? NO! Is there a mistake in the idea? Must the Final War come? Must mankind wipe itself out? I heard from a friend here (the inventor of a propeller-railway) "the power of human weapons and the present standard of ethics, morals and classroom of mind is like giving babes some matches, razor blades and gasoline to play with."

A Russian scientist before the Great War (his name is not known, for publication of his book was forbidden to be printed in Russia and was printed in another European country without his name) stated that wars must always be longer, heavier and bloodier, and that they will end, not with a glorious victory, of one of the fighting nations, but by social revolution of all the nations who make war. The Great War showed that the Russian professor was right. Is Herr Spohr right too, and must the Final War come?

The author tells us himself about "psychological reasons." He says, "the balance of power . . . some more war machinery here . . . some more war machinery there . . . those airmen who are in love with their guns . . . if one gun goes they all go . . ." The stone begins rolling, the Final War begins.

In the end of the Middle Ages, in a book called "Epitome re Militaris" the phrase was first printed, *"Si vis pacem, para bellum."* "If you want peace be ready for war." Events have shown us that it is the greatest nonsense in the world. The states with a practically and relatively little army have had no wars for a long time (Switzerland, Holland, the Scandinavian countries, etc.) Power has its best balance if there is no power on other side. (I speak only of military power.) If there is power on one side, men will always like to show the others their own. "I have more!"

Secondly Spohr says, "The men who make terms don't feel the effect of their weapons." Maybe some new inventions, like air raids by rockets spreading death over a whole country, will make this biggest danger smaller. Maybe the Conference on Disarmament will help a little.

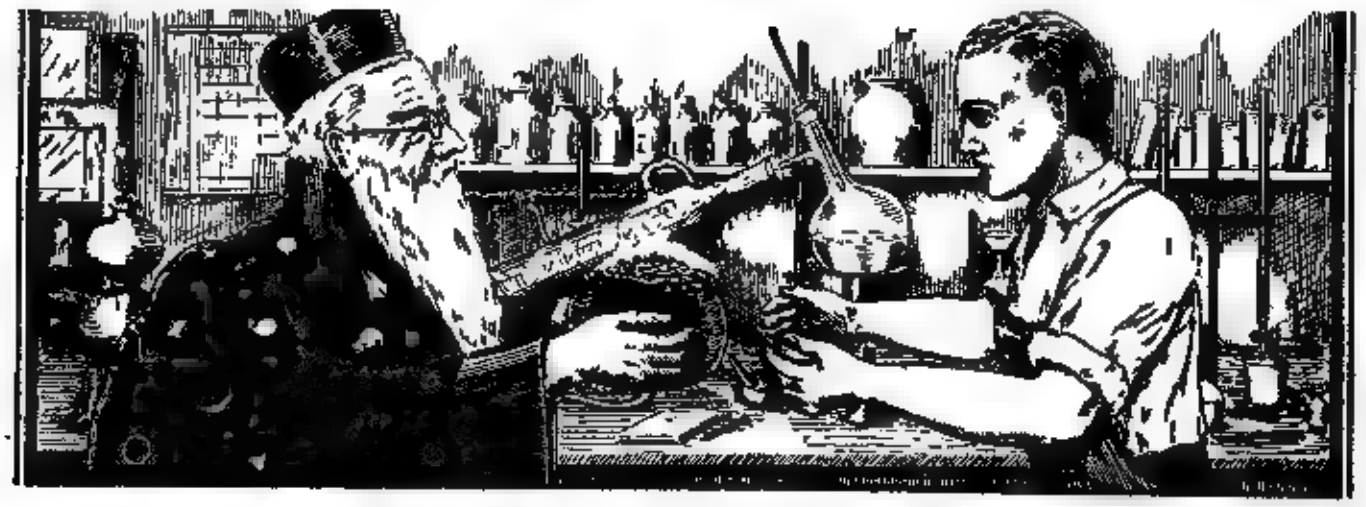
But the most important thing—who has the benefit of a war? The generals? Not always. It may happen that the war ends in a revolution and they may feel their machine guns on their own bodies. But in every case the owners of factories of guns and ammunition have a benefit.

That is the most important point. It is said, the youth are feeling better than the old men (remember the Council of Four in "The Final War.") I believe it, but there are militia-patriotic types of gun-lovers among the youths. But the youth of each generation can do one thing. I said, war means big business for some men. Well, make an economic situation that war will mean *bad* business. In Europe it can be so, then the crisis will be over.

That is the reason I have for hoping that the Final War will never come. And if men of one nation learn and see enough of other

(Continued on page 304)

HERE IS A MONEY-MAKING IDEA!



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THE READER SPEAKS

(Continued from page 233)

nations, they will lose the idea of war against a nation in whom they have friends.

It is a theme for long discussion, and it is impossible to say much here. But there is a hope . . .

Some of the other stories, such as "The Reign of the Star Death", "50th Century Revolt" were excellent. "The Last Woman" and "Red April, 1965" were also very good. But they did not give as much to think about as the Final War.

Willy Ley,
Berlin, Germany.

(Herr Ley states a fact that Americans should well appreciate. Although abstractly the thought of going to war with England, France or Germany might not be repulsive to us, yet were we to realize that to do so might be to kill our friends in those countries, we would be horrified. If we realized that all foreign nations are merely people, families of men, women and children—with hopes and aspirations like our own, and with no more desire to kill than we have, then all thought of war with them would be abhorrent.—*Editor*)

Some Overdue Praise to Beattie

Editor, WONDER STORIES:

I receive the greatest enjoyment in reading your "Reader Speaks." It gives everybody a chance to get some criticism out of their systems. It also gives other readers plenty of food for thought.

Until recently I have been bothered by an obsession that there was something missing in all the letters I have read. It suddenly came to me as I was reading a story in the April issue entitled "The Man Who Shrank." It's just this. All the correspondents have been handing out the praises to such authors as Williamson, Keller and others and not one out of ten even mentioned George B. Beattie. I am not saying that Keller and the rest are not superb writers but it is my opinion that Mr. Beattie is far the greater author. If the readers would notice that all of his stories are entirely different from the other authors. Not only that but each one of his manuscripts are different from the first one. Most (notice I do not say all) authors write stuff on the same general line. Keller writes mostly on biology and medicine. Not all the time but most of the time. The others do likewise.

So the main purpose of this letter is to give a little long over due praise to Mr. Beattie. So here's wishing you a long and successful life as WONDER STORIES' best author, Mr. Beattie.

Now, as for the rest of the magazine. I can truthfully say that I do not like Mr. Taine's type of writing in the least. I suppose I am just different from the rest because all I see in your columns are letters of praise one right after the other. He seem's to go over all right with the rest of the science fiction world, so I'll not be selfish and ask you to kick him out. If the rest like him, leave him in.

I wish to give a separate paragraph to the honor of a new writer, Mr. Carl W. Spohr, the author of that magnetic smash, "The Final War." It is the best story published for quite awhile. I, and I'm sure that others, hope to see more of his work among your pages. For a starter that story is "wonder"-ful, alright.

Keep up your marvelous work.

Stockton Shaw,
San Francisco, Calif.

(As an example of Mr. Beattie's best work, with one of his original themes and plots, we recommend "The 'Platinum Planets'" in the current issue. We shall be glad to get Mr. Shaw's opinion on it. We agree with him on Beattie's talents, although we do not wish to take sides on the question—who is our best author! That is something our readers must decide.—*Editor*)

Some Really Brainy Fellows

Editor, WONDER STORIES:

I am a bit worried about this letter. I started off to write a condemnation of Taine's "Time Stream", and, as is my wont, I read it through once more to crystallize my antipathy.

Now I can't find anything wrong with it! Yes, you must certainly publish more of Mr. Taine's work. It's great!

Maybe I am rather late with my opinions, but I have only just received the March issue, which is a grand success, with perhaps one slight defect.

There were three "war stories" in it. They were all good ones, it is true, but couldn't you have carried one over to the next issue? No matter how well they are written, stories with that theme are bound to have something of a sameness about them, and to read three together is slightly monotonous . . . however.

Ever since you changed the size of our magazine to 12"x9", it has steadily improved, until one would consider that it had reached the peak of perfection. But it is plain to see that WONDER STORIES can never stop progressing. It must go on and on until the people of A.D., Heavens know when, regard it as a historical encyclopedia . . . take that as you will . . .

But what a lot of rot I am talking . . .

Back in the February issue a nasty fellow by the name of Abbey A. Schwartz aired his conviction that WONDER STORIES was read only by morons—to use one of your expressive idioms. Probably since then you have been flooded with correspondence containing definite proof to the contrary, but I must certainly add my little bit to the deluge. .

Here, in an area of about 8 miles we have nearly a score of members, all of whom read this magazine. They are all well-educated, and we have one or two really brainy fellows among us. And you can't kid me that they read WONDER STORIES just for amusement because, as secretary of our Science Fiction Club I know differently.

We glean an enormous amount of scientific and general information which is all filed and indexed for future reference. And the fellow in charge of this "information bureau" has a busy time of it I can tell you.

So there.

One of our members, who has artistic leanings, disagrees with those who want Paul to do all the Illustrations. He says that to illustrate a whole magazine is too much, and may lead to stereotyping. Personally I know nothing about the business, but I certainly think a little variation would improve matters—though I hasten to add that no one can come up to Paul's standard.

I should be glad if you would send me a supply of the S. F. Movie blanks, as I have a dubful of members waiting to sign, and they do not wish to mutilate their magazines. I presume that petitions from England will have as much effect on Hollywood as from anywhere else.

Here's to the next issue.

P. Knorr,
(Secretary, S. F. C.)
Hayes, Middlesex, England.

(We think that the opinion from our readers has effectively disposed of Mr. Schwartz. However, after all of this refutation, we shall be glad to hear from him again, if he still wishes the use of our columns in expressing his point of view.—*Editor*)

Speaking of That Dynamic Story

Editor, WONDER STORIES:

After reading many brickbats thrown at Mr. Schwartz (who by now must be hiding his face in shame), I wonder why the readers do not give a little credit where credit is due. I am speaking of that dynamic story "The Conquest of Two Worlds." I was surprised that this story did not receive more than a flurry of comment. Even Mr. Hamilton will have a hard time to duplicate this story which seems destined to pass as "another story" to most readers. Speaking of credit, it is hard to pass up Mr. Gernsback's editorials which seem to score in every issue.

I am glad to see that a sequel to "The Final War" is going to appear in a future issue. It will be interesting to note how Mr. Spohr will bring together the far-thrown effects of that terrible war which he pictured previously.

The June issue proved to be a pip containing only one mediocre story—"The Message From Mars." This story could have been made more plausible by using a more plausible way of com-

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THE READER SPEAKS

versing with Mars than was used. The "Invisible City" proved to be a typical "Smith" thriller, does that speak sufficient for itself? The "Hell Planet" turned out to be one of those different stories which are always in demand. And the story which made a rather "shaky start" righted itself and is increasing in POWER. If you have not guessed it by now I mean "The Brood of Helios."

That photo of Paul which was promised for an earlier issue has not yet appeared. Is Paul too bashful? I hope not after all the good work he has done for WONDER STORIES.

Ben Freed,
Pittsburgh, Pennsylvania.

(Our impression was that a full measure of credit was given to Hamilton by our readers for his splendid "Conquest of Two Worlds." He certainly deserved it.—*Editor*)

A Study in Chromosomes

Editor, WONDER STORIES:

This letter concerns the "Last Woman" which appeared in the April, 1932 issue. This story I consider to be one of the best, most original (for science and plot) story you have printed yet—I took this opinion on the third reading. The determinants of sex suggested in the story irritated my curiosity bump and made me want to learn more about it, so I did a bit of research work.

The results of my research work did not agree with the story in all particulars but the high-lights synchronized.

On page 1240 Mr Gardner states that the XX and XY chromosomes are the determinants of sex, the former fertilizing an ovum gives a female, the latter a male. I found that the Y chromosome had nothing to do with the determining of sex—that the XX chromosomes produce femaleness while an X (single X) chromosome produces maleness.

Furthermore—the sperm does not contain an XX or XY chromosome. It contains either an X or a Y chromosome. When the sperm unites with the ovum (the ovum contains an X chromosome) the X or Y chromosome—whichever the sperm contains—combines with the X chromosome of the ovum.

If the sperm did contain an XX or XY chromosome when it united with the ovum—which would have to contain an equal number of chromosomes—there would be double the number of chromosomes in the body. In a human being there are 48 chromosomes in each cell determining the dominant characteristics of the person. If the person had a parent with curly hair and brown eyes and a parent with straight hair and blue eyes the person would have either curly hair and brown eyes or straight hair and blue eyes with the chances of having the C. H. and B. E. in the ratio of 3 to 1 favoring the C. H. and B. E.—this is a direct result of the Mendelian Law. A list of the dominant and recessive characters follow.

Dominant	Recessive
Brown eyes	Blue eyes
Curly hair	Straight hair
Dark hair	Light or red hair
Normal pigmentation	Albinism
Fused fingers or toes	Normal fingers and toes
Supernumerary digits	Normal number
Fingers of only two joints	Fingers with normal number of joints
Legs dwarfed	Legs normal
Normal sized body	Midget
Normal mind	Feeblemindness

I obtained this knowledge as a direct result of this story—at least the majority of it—I obtained the rudimentary ideas from Biology I and II at school and Hygiene I. I have been interested in paleontology and have a greater knowledge of this subject—I am not afraid to admit—than the majority of your authors.

James McCrea,
Philadelphia, Pa.

(This clear and careful analysis of a biologic problem by one of our average readers is, we think, the best answer to Mr. Schwartz' description of the "wide-mouthed" horror. We have no other comment.—*Editor*)

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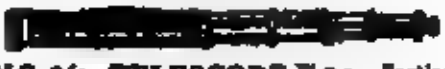

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What is Your Science Knowledge?

1. What is used as a cutting edge for drilling tools? (Page 264)
2. What is St. Elmo's fire? (Page 269)
3. What peculiarity about Jupiter's surface has puzzled astronomers? (Page 248)
4. What is the circumference of Jupiter? (Page 249)
5. What are "the coal sack" and "the Magellanic clouds"? (Page 149)
6. What is the sunlight temperature of the moon's surface? (Page 201)
7. How is it possible to circle about the earth and overcome its gravity? (Page 241)
8. How could such a satellite maintain itself in space? (Page 241)

BOOK REVIEWS

RIDDLES OF SCIENCE by Sir J. Arthur Thomson. 387 pages, stiff cloth covers, illustrated. Size 5¾x8½. Published by Liveright, Inc., New York. Price $3.50.

The distinguished Scotch scientist, author of the "Outline of Science" has written a number of suggestive and stimulating essays on unexplained and apparently mysterious scientific phenomena.

With calmness and lucidity Sir Arthur digs into such diverse subjects as suspended animation, mental telepathy, spiritualism, evolution, sex, emotions, the nine lives of the cat and many natural history credulities.

His method is not to attempt a definite scientific explanation for things that have puzzled the race for centuries. Rather he tries to extract from observed facts what residue of actual scientific basis exists, and so narrow the range of possible explanations. Those who come to the book expecting to have their favorite superstitions explained away will doubtlessly be disappointed. But new avenues of thought will undoubtedly be stimulated. The book is absorbing and intensely worthwhile throughout.

HOW TO BE INTERESTING by Robert E. Rogers, 170 pages, stiff cloth covers, size 5x7½. Published by L. C. Page & Co., Boston. Price $2.00.

Professor Rogers attempts here the gigantic task of telling us how to develop interesting personalities. As he states, he does not pretend to outline any 15-minute-a-day course, or promise success in life to the readers of the book. Rather he outlines the elements of personality, and why some people are interesting, and others are bores. We learn in the last analysis that people who hold our attention are those who really have something to say, who say it with "clean articulation" and sincerity. Two things are necessary in so far as people themselves are concerned. The first is "the will to be interesting" and the second is "the will to be interested." The book is amusing and clever in places and on the whole reads well.

PROHIBITING MINDS, by Stewart Paton, M.D. 197 pages, stiff cloth covers, size 5x7½. Published by Paul B. Hoeber, Inc., New York. Price $2.00.

Dr Paton is a psychiatrist and looks at the problems confronting the world from the standpoint of our mental processes. His conclusion is that our present day chaos has resulted from our inability or unwillingness to think through our complex problems. Whenever we meet a social phenomena that needs careful study and research, we immediately seek for a law or a means of prohibiting something. As a result we have burdened our social system with a mass of prohibitions that prevent truth from seeing the light of day, and invert our own mental processes.

We try to prohibit war, drinking, sex emotions, gambling and even babies. Dr. Paton pictures America as a place where madmen rush about snooping into other people's affairs seeking for something to prohibit. These people are affected, says the author, with some mental perversion of their own, that urges them on. He would have us beware of such prohibiters.

There is undoubtedly a good deal of truth in Dr. Paton's theme. But he reiterates it tonelessly so many times throughout the book that one feels that he is circling his theme unable to develop it further. However it gives us a useful survey of our lunatic civilization.

BRAIN TEASERS by Julian Longstreet, 250 pages, stiff cloth covers, size 4½x7½. Published by L. C. Page & Co., Boston. Price $1.50.

This book has a hundred or so little mental gymnastics in arithmetic, algebra or plain common sense. Many of them will seem familiar to readers, but others may be new to round out one's inventory of conundrums. None of the problems need more than a knowledge of elementary algebra, and if even that proves too difficult the answer to each problem is found on the page following the question.

RAMBLING THROUGH SCIENCE by A. L. DeLeeuw, 318 pages, stiff cloth covers, illustrated, size 5½x8. Published by Whittlesley House, McGraw Hill Co., New York. Price 2.50.

This book comprises thirty chapters explaining the nature of some of the principles of science. How can the sun-earth distance be measured, how is an atom measured; what is the fourth dimension, a photoelectric cell, what are microbes!

This book obviously written for the beginner in science gives a broad view of science as we know it today explaining how so many of our recent discoveries came about.

The author writes informally, as the publishers say, "in a conversational style" and does manage to convey an alarming amount of general information between two covers.

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DR. FRANK B. ROBINSON
Founder of "Psychiana" and author of "The God Nobody Knows," "America Awakening," etc.

"PSYCHIANA"

Believes And Teaches As Follows:

FIRST—That there is no such thing as a "subconscious mind."
SECOND—That there is, in this universe, a FAR MORE POTENT and DYNAMIC POWER, the manifestations of which have been erroneously credited to some other supposed power called the "subconscious mind."
THIRD—That this INVISIBLE, DYNAMIC Power is THE VERY SAME POWER that JESUS USED when He staggered the nations by His so-called "miracles," and by raising the dead.
FOURTH—That Jesus had NO MONOPOLY on this Power.
FIFTH—That it is possible for EVERY NORMAL human being understanding spiritual law as He understood it, TO DUPLICATE EVERY WORK THAT THIS CARPENTER OF GALILEE EVER DID. When He said "the things that I do shall YE DO ALSO"—He meant EXACTLY WHAT HE SAID.
SIXTH—That this dynamic Power is NOT TO BE FOUND "within," but has its source in a far different direction.
SEVENTH—THAT THE WORDS OF THIS GALILEAN CARPENTER WENT A THOUSAND MILES OVER THE HEADS OF HIS HEARERS 2,000 YEARS AGO, AND ARE STILL A THOUSAND MILES OVER THE HEADS OF THOSE WHO PROFESS TO FOLLOW HIM TODAY.
EIGHTH—That this same MIGHTY, INVISIBLE, PULSATING, THROBBING POWER can be used by anyone—AT ANY HOUR OF THE DAY OR NIGHT and without such methods as "going into the silence" or "gazing at bright objects," etc.
NINTH—That when once understood and correctly used, this mighty Power is ABUNDANTLY ABLE, AND NEVER FAILS TO GIVE HEALTH, HAPPINESS, and OVERWHELMING SUCCESS in whatever proper line it may be desired.

DR. FRANK B. ROBINSON

considered by many to be one of the keenest psychological minds this country has ever produced, and one of the most earnest intense searchers into the spiritual realm, believes, after years of experimentation and research, that there is in this world today, an UNSEEN power or force, so dynamic in itself, that all other powers or forces FADE INTO INSIGNIFICANCE BESIDE IT. He believes that this power or force is THE VERY SAME POWER THAT JESUS USED. He believes further that the entire world, including the present church structure, MISSED IN ITS ENTIRETY the message that He came to bring. He believes that

The world is on the verge of the most stupendous spiritual upheaval it has ever experienced—the advent of Christ being of small importance when compared to it.

FREE -:- FREE -:- FREE

Every reader of this magazine is cordially invited to write "PSYCHIANA" for more details of this revolutionary teaching which, if true, might very easily be discussed the ENTIRE WORLD ROUND. Dr. Robinson will tell you something of his years of search for the truth as he KNEW it must exist, and will give you a few facts connected with the founding of "PSYCHIANA." NO OBLIGATIONS WHATSOEVER. Sign your name and address here.

NOTICE

Requests for this course of instruction and information concerning it have broken all records. Replies have come to us literally by the thousands from more than 74 different countries and students have enrolled for the course by the hundreds. "Psychiana" expected that the truths of its teaching would be recognized at once, but did not anticipate the overwhelming number of inquiries received to date. We are rapidly expanding our facilities and Dr. Robinson hopes to personally reply to all letters. Please print name and address plainly on the coupon.

WS-8

Name .....

Street and Number .....

City .....

State .....

Send this to "Psychiana," Moscow, Idaho.

Honestly...Why do you want $3,500.00 CASH NOW?—

I WILL PAY $250

For the Winning Answer to this Question

I am going to give $3,500.00 to some deserving man or woman who answers my announcements. *You may be the one to get it!* But, before I give it to anyone I would like to know just *why* you want $3,500.00 cash now. Just answer this question—tell me in a sentence of 20 words or less, and in your own way, why you want $3,500.00 cash now—*nothing more to do toward the $250.00 cash prize!* Sounds easy? It is easy! The first answer that comes to your mind may win the prize. No selling—no soliciting. There are no strings at all to this amazing prize offer of $250.00 cash. ALL persons 16 years of age or older owe it to themselves to enter this contest.

20 SIMPLE WORDS WIN $250.00 FOR SOMEONE, MAYBE YOU!

Nothing More for You to Do!

$250 Prize given just for the winning answer to my question

There is no way you can lose. Simply tell me why you want $3,500.00 cash *now*. The prize for the winning answer is $250.00.

The mere fact of sending in a few words for this big $250 cash prize qualifies you for the greater opportunity to

WIN $3,500 CASH

Or a STUDEBAKER-8 SEDAN and $2,000.00 CASH

This huge prize is ***extra and separate*** from the cash prize offered for the best answer to my question in only 20 words or less. No wonder we say that here's your opportunity to win a fortune. Just imagine! $3,500.00 cash besides . . . all coming to you at once. Think! Why do you want $3,500.00 cash *now?* Do you want it to start a business of your own, pay off a mortgage on your home, buy new furniture or clothes? Maybe you want it to help you get an education. Consider all the things you could do with such a huge sum. Plan now—then write your answer—rush it to me at once. Yours may easily be the winner. All replies become the property of Richard Day, Manager.

BE PROMPT! I Will Send You a $100.00 Cash Certificate AT ONCE!

To make it worth your while to be prompt in sending in your answer to my question, "Honestly . . . why do you want $3,500.00 *cash now?*"—if you will see that your letter is postmarked not more than three days after you read this offer *I will send you a Cash Promptness Certificate entitling you to an extra $100.00 in cash* should your reply, in the opinion of the judges, win the $250.00 cash prize offered above, making a cash prize of $350.00 in all.

HUNDREDS HAVE WON

Throughout the past year we have given financial help to hundreds of deserving people in all parts of the United States . . . we have given away hundreds and thousands of dollars in prizes. Beemer won $4,700. Harriet Robertson won $1,100. Hundreds more made happy with huge prizes and cash awards. Now is YOUR opportunity—ACT TODAY!

RULES

Only one answer accepted from a family. Use your own name. $250.00 given for best answer to my simple question, "Why do you want $3,500.00 **cash** now?" Answers must be postmarked not later than November 1, 1932. Judges will consider answer only for practical value of the idea, construction and spelling. Neatness or ingenuity of submitting answer not considered. Duplicate prizes will be given in cases of duplicate winning answers.

RICHARD DAY, Manager

909 Cheapside, Dept. B-6H Cincinnati, Ohio

Just Sending Answer Qualifies You for Opportuni $3,500.00

Some say I am wrong. Ti ...nat giving money to people will not help to bring ...ek prosperity. They say that the people who get money from me will spend it foolishly. Now I want to find out. I am going to give away $6,000.00. Someone is going to get $3,500.00, all cash. If I gave you the $3,500.00 how much happiness could you buy with it? Tell me in 20 words or less. Just sending an answer qualifies you for the opportunity to win $3,500.00. If you are prompt I'll send you a $100.00 Cash Certificate AT ONCE! Here is an opportunity of a lifetime. Costs you nothing to win. Rush your answer today. Send no money—just tell me how much happiness you could buy with $3,500.00 right now—If I gave you the $3,500.00 that I have promised to give to some yet unknown deserving person.

Richard Day

Use Coupon or Write Letter with Your Answer

$250.00 PRIZE COUPON

RICHARD DAY, Manager
909 Cheapside, Dept. B - 6H, Cincinnati, Ohio

Here's why I want $3,500.00 *now:*
(Write your answer plainly here, in 20 words or less):

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.....

.....

Name.....

Address.....

Town..... *State*.....

Date I read your offer.....